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Results of Osteopathic Treatment of Mental Diseases

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IN presenting statistics of results obtained in the treatment of mental diseases I shall deal with 415 cases at the Still-Hildreth Sanatorium covering a period of four years and three months.

Most of the important types of mental diseases, as well as several of the rarer types were presented among the patients referred to. The results to be mentioned are based practically altogether on pure osteopathic work; that is to say, spinal correction and adjustment, since in no case have we resorted to drugs or surgery with these patients, and in comparing our results with the statistics in the medical world where surgery and medical procedures have been used, we have every reason to believe, as figures will show you, that the osteopathic method is decidedly superior.

For a long time some form of pelvic disorder has been considered a causative factor in mental troubles of women, and surgical correction of the disorder has been regarded a curative factor. In analyzing our statistics it will be seen that we have handled successfully all types of mental troubles in women with the osteopathic treatment alone. A great deal has been claimed for orificial surgery in connection with mental diseases and reports of cures are published from time to time following such treatment. I may say that absolutely similar cases have been cured by osteopathy alone, so that in my mind the direct relation between surgical procedure and the mental state is questionable. I do not doubt that mental cases may have conditions requiring surgery, and I have no objection to it under those circumstances, but I do not hesitate to say that the principle of surgical procedure as a curative agent in mental states is as fallacious as that of drug medication. I say this with unshaken confidence after an experience of some eighteen years in the study of these conditions, both in medical and osteopathic hospitals, and in connection with some of the most eminent medical men living in that department of work.

The only measure used in treating the patient besides the spinal adjustment is the warm bath and proper dieting. The use of the warm bath is chiefly for soothing purposes in cases of restlessness and irritability and to act as a sedative in cases of insomnia and the hot bath to aid in the elimination of impurities from the blood. These

are all distinctly palliative measures of course, as opposed to curative, and similar measures are used in medical hospitals. The superiority of our results, therefore, could hardly be ascribed to hydrotherapy, but must of necessity be due to the adjustment. In the medical world drugs are used chiefly for palliative, as opposed to curative purposes, such as the relief of pain, insomnia and so on. These results we readily obtain without the use of any drug whatsoever, so that we find both from the palliative, as well as curative standpoint, that drugs are absolutely useless in the treatment of the insane.

In noting our results, furthermore, it will be seen that a certain proportion of cases did not recover. The interpretation of this experience would be that unquestionably certain forms of mental diseases and certain stages of advancement are associated with degenerative changes in the brain tissue and such are distinctly incurable. We have as yet no evidence that anything can replace destroyed brain tissue; our recoveries, therefore, will be found among those types not so associated and may be classified under two heads: First, functional brain conditions only, which as the name indicates are unassociated with structural changes; second, the early stages of chronic progressive conditions, which at a later period involve degeneration and which are curable, therefore, only in less advanced stages.

Our statistics, including, as they do, all cases which remained any length of time and some of many years standing, and very advanced grades on entrance, involved many with undoubted degeneration of brain substance. These we had every reason to believe offered a very unfavorable outlook, but we were willing to see what could be done for them, even though they tended to lower our percentage of recoveries. I would not intimate that merely because a case is very chronic it is necessarily incurable, because some progress much more rapidly than others, and the really important point is the stage of progression in estimating a prognosis in chronic conditions.

Our experience shows that in several cases of more than five years standing we have obtained results, evidently because they had not advanced to a degenerative condition; on the other hand, some cases of lesser standing have advanced very rapidly so that they have proved incurable. All the doctor can do is to study the individual case and estimate how far it may have advanced before beginning the treatment. We find also that so far as helping a patient is concerned, even though recovery does not take place, so much improvement frequently follows that the patient may even be able to look out for himself in some small way, or be less of a burden to his family, capable of living at home and the like, which is surely preferable from the relatives' point of view.

The osteopathic attitude toward mental diseases in general of course is similar to that in other diseases, namely, some form of blood disturbance to the involved part, which can usually be traced directly or indirectly to a disturbance of spinal innervation and hence the applicability of the lesion theory. It is well known that the innervation of the blood vessels to the brain comes from the dorsal cord, passing out over the anterior roots to the lateral chain ganglion of the sympathetic system, turns upward passing through the cervical sympathetic to the brain. It may be easily understood, therefore, how lesions affecting these nerves could cause disorder of the blood supply. High grades of congestion or anemia may result, both of which are deleterious to cerebral activities.

Again, there is the question of blood pressure, which is controlled through the nerves from the spine and some types of brain diseases have remarkably low pressure, others very high; both conditions if persisting any length of time are apt to cause mental disorders, whose nature varies according to which is present. For example, in states of depression we find usually very low blood pressure; on the other hand in states of excitement the blood pressure is usually high. Again there is the problem to consider of impure blood, which brings us to the subject of autointoxication or toxemia; such impurities may cause either a functional disturbance of the brain or degeneration outright. Therefore, the importance of purifying the blood, and, in this connection, the value of hydrotherapy in aiding elimination by skin as well as of rectal injections for similar purposes in the colon.

Our records show the most important spinal lesions to be the upper cervical and upper and mid-dorsal and in many instances we find these lesions produced in connection with some form of wrenching or twisting, or local injury to the spine according to history, symptoms appearing shortly thereafter.

Our classification of mental diseases into varying groups has been influenced by three considerations: difference in pathological anatomy; the causative factor (such as alcoholic insanity, for example), and the particular group of symptoms (as melancholia or depression). Arriving at a diagnosis of a condition we can tell roughly whether we are dealing with a functional or organic disturbance of the brain and hence make a prognosis. The organic disease involving degeneration of tissue is incurable; the functional is theoretically curable; hence, the value of classification. Indeed, mental diseases vary as much from each other as to cause, pathological anatomy and symptoms, as diseases of other organs; for example, the lungs. Compare in this regard the difference between tuberculosis, pneumonia and abscess of the lungs, these varying fundamentally from each other in etiology and symptomatology, as well as in prognosis. I shall briefly proceed to analyze the most important brain groups.

Dementia Praecox

The name indicates mental enfeeblement, coming on during adolescence. It is of a chronic progressive nature, appearing usually in the second or third decades, either with an insiduous onset, gradually becoming more marked, or starting up suddenly as an acute attack, which may become chronic, or clear partially or completely and be followed by lucid intervals, another attack coming on and the condition becoming persistent. In its advanced stages it seems to be associated distinctly with degeneration of the brain and is probably incurable; in the earlier stages, however, there is no demonstrable change in the cerebrum and the process evidently takes some time to develop. It is in this earlier stage, therefore, that the hope for recovery lies.

One of the foremost psychiatrists in the world, Prof. Kraepelin, asserts that it is the resultant of an abnormal blood state, that is, autointoxication, which in time causes degeneration of the brain. He does not state the source of such intoxication. Certainly there is no evidence of any poison from without affecting the blood, and it must, therefore, be derived from within, and due to some preceding abnormal bodily state. The osteopath can readily accept this theory of Kraepelin and simply proceed a step farther and explain the pre-existing bodily state in the terms of osteopathic theory. Therefore, if such pre-existing condition is removed in time, and the blood thereby relieved of its source of poison, the patient should recover.

Our results tend to confirm this theoretical consideration, since our tables show 129 cases of dementia praecox with forty-one recoveries, a percentage of about one-third, and it must be remembered this list includes many cases that were advanced chronic on entrance. If we eliminated these apparently hopeless cases we would show a much higher percentage, nearer two-thirds. The recoveries are, of course, among the less advanced cases, though some of the cures have a history of four to five years' standing on entrance. Not every recent case, to be sure, has recovered. We must be perfectly frank with ourselves in this regard. The reason has not been apparent for such failure, but I am inclined to think that we simply did not strike the proper cause in those cases, since as I have already said, the pre-existing bodily state which produces the autointoxication may vary and we doubtless overlooked it in some cases. I firmly believe when we know more about this subject we shall find every recent case and those not very far advanced, recoverable. Although we have fallen far short of 100 per cent recovery, since this disease is regarded by the medical men as incurable and they are unable even in the earlier stages to check it, we are very much pleased with our record such as it is, even with its limitation.

Manic Depressive

This group is named by the dominance of certain characteristic symptoms, chiefly of an emotional nature, such as marked depression with all of its associated phenomena, as a tendency to suicide, weeping, lamentations, notions of unworthiness, delusions of sin and the like. Also there is the

opposite type, the so-called "manic" characterized by excitement, exaltation, restlessness, talkativeness, irritability, impulsive actions, hence violence to others; tearing of the clothing, bedding, noisiness and the like. These states may alternate with each other, with or without lucid intervals between, the so-called "circular insanity" or the "manic state" or "depressed state" may persist indefinitely, or either clear and a lucid interval intervene for weeks, months or years without any recurrence, although such recurrences are apt to take place in the majority of cases.

This condition seems to be functional in character, coming on usually in the second or third decades of life, though the severer forms, particularly of depression may not be very noticeable until the forties or fifties. If the condition persists indefinitely it progresses into the so-called "terminal dementia" and is associated with mental enfeeblement and degenerative change in the brain. The theoretical prognosis, therefore, is good if it is not a chronic advanced condition on entrance. Our figures show 131 with seventy-six recoveries, about 60 per cent. In this group, as in the preceding, those proving amenable to treatment in general are advanced cases upon entrance.

It may be well to state that no discrimination has ever been made at the sanatorium in receiving advanced cases because of possible interference with statistics. Every applicant is given opportunity to benefit from treatment, regardless of the effect on the appearance of the records.

Psychoneuroses

This group includes functional brain disturbances with very variable symptoms, including sub types such as hysteria, neurasthenia, hypochondria, psychasthenia and the morbid phobias, or fears, anxieties and the like in which the patient can appreciate the morbid character of the trouble and hence is really not insane. These patients if the treatment is begun early should recover; on the other hand, if the conditon has lasted many years it becomes a morbid habit, as it were, which like most habits of many years standing are very hard to clear up. Our records show fifty-seven cases with forty-six recoveries.

This group is especially interesting from the fact that while it offers an excellent outlook if not advanced, the success depends largely upon the intelligent management of the case, inasmuch as we are dealing with a unique type of mentality which undoubtedly is caused by physical conditions, but in turn the abnormal state tends to react upon the physical condition, forming a kind of "vicious circle." In addition, therefore, to the removal of the physical condition, education of the patients is often necessary to set their minds right; therefore, the mental state cannot be neglected in the treatment. This does not mean any mysterious form of mental treatment, such as psycho-analysis, hypnotism, faith cure, or anything of that kind, but common sense talks to patients, explaining fundamentals of the workings of the brain, showing them how their brain is wandering in error and point out the road to health. They are usually amenable to reason inasmuch as they are not insane for the main test between sanity and insanity is the amenability to reason on the part of the patient. I would suggest, therefore, to the general practician if he is not succeeding with cases of this group he should not be discouraged, but should call in help from those doctors more experienced in this line.

In hysteria we have a hundred per cent recovery.

Paresis

This group includes fourteen cases with two recoveries. These were typical, showing positive bold reaction, as well as classical clinical symptoms. The two reported as well showed negative blood findings upon departure with all symptoms cleared up. They returned to their work and up to the present time have continued in their business successfully; they were both incipient cases, probably the disease was checked before it obtained a hold on them. The other cases were well developed before entrance and probably degeneration had already occurred to a certain extent, making it too late to hope for recovery. The fact that results were obtained even in two cases is particularly interesting since it would seem to indicate that osteopathic treatment can reach conditions ordinarily considered of syphilitic origin.

Traumatic Psychosis

This disorder represents an abnormal state, functional in character, resulting from a severe blow to the skull unaccompanied by fracture or hemorrhage. According to the medical authorities these cases commonly become chronic. Our cases here were all in the early stages and seemed to have recovered completely and have been in good condition since. Of the four cases treated all recovered.

Paranoia

There have been five cases with no evident results. This is a chronic delusional insanity, comparatively rare, with very obscure causes, possibly due, as some have suggested, to inherent defect in brain organization in the beginning, since they commonly show peculiarities from early childhood.

Psychopathic Constitution

In this group there were ten cases with no recoveries, though some cases improved. This represents a mental deficiency existing from birth, frequently associated with abnormal structural development of the brain; of course with an unfavorable prognosis.

Toxic Psychosis

This group includes mental states resulting from the use of drugs, such as morphine, alcohol and the like. There were thirteen cases with twelve recoveries. A probable explanation of this condition is that the excessive craving leading to the formation of the habit may be the result of a pre-existing structural disturbance leading to the abnormal function, that is, the excessive craving. Therefore, such should be relieved following structural adjustment.

Infection Psychosis

There were fourteen cases with twelve recoveries. This group includes the mental conditions produced by some infectious process, such as influenza and superficially resembles a fever delirium, with the important difference, however, that it often persists for months or even years after the fever has disappeared. When taken early they appear readily amenable to treatment.

Dementia

By this term we mean mental enfeeblement, which after it has existed any length of time is usually associated with brain changes. Aside from dementia praecox, already mentioned, it is frequently connected, with senile changes, arterial and kidney diseases, epilepsy and so on. There were twenty-three cases with no recoveries Since we have destruction of brain tissue, of course we could not hope for a favorable prognosis.

Conclusion

The total proportion of recoveries was a little over 46 per cent, a very interesting result, since we are dealing in general with that class of disease ordinarily offering the poorest outlook and which if existing any length of time usually is considered hopeless. Many of our cases came to us from medical institutions where such a prognosis had been given and yet became well under treatment. These are referred to from time to time in our quarterly bulletins, so that we have demonstrated the possibility of a cure in cases formerly considered incurable. We have every reason to think, that in all cases where there is no evidence of destruction of brain tissue a cure would be brought about if taken in time, and, as mentioned before, the only unfavorable cases should be the long standing chronic conditions, or the more recent conditions where the signs show undoubted degeneration of tissue.

It is impossible, then, to give an opinion on a case without a certain amount of study of the individual patient. We certainly feel gratified at such a remarkable result, considering the field of disease in which we are working, and feel we are fully justified from our statistics in backing up Dr. Still in contending that the "Osteopathic principle is superior to surgical and medical methods in the treatment of diseases generally, and specially in the mental cases."

STILL HILDRETH SANATORIUM.

Pelvic Inflammation

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(Paper read before the Boston Session of the American Osteopathic Ass'n, July 1-6, 1918.)

THIS subject is chosen for the reason that many cases in which no other very definite diagnosis can be made, present themselves to the osteopathic physician. This diagnosis is neither definite nor strictly scientific, yet no other is sufficiently comprehensive to cover the pathology existing. While there are many organs and tissues in the pelvis, and any one of these may be involved alone, the fact is that they are presented to the physician with group involvement, rather than single organ or tissue involvement.

Originally the disease may have been seated in a single organ or tissue, but by continuity, similarity of blood and nerve supply, intimacy of function, the trouble has spread until it has become more or less general throughout all the pelvic tissues. It is this fact that I wish especially to bring to your attention for it is of the greatest importance in treatment. What was originally a mere endometritis has become an endometritis plus a salpingitis, plus an ovaritis, plus some degree of peritonitis or cellulitis. Each of these possible complications and extensions must be considered in order to give effective treatment.

The question may be very pertinently asked, why do women suffer so much more frequently from pelvic diseases than do men? For each pelvic organ that one has, the other has its analogue. Certainly men, more numerous as wage earners, engaged in more arduous tasks, subject to greater risks of accident would, and I believe do, acquire more numerous and spinal osseous lesions than women. There must be back of this some fundamental cause that lessens the resistance of the female pelvic tissues and invites infection and disease.

We are sometimes told that there is an inherent weakness in women. Such weakness is not observed in the aboriginal women nor in our girls who are the equals of our boys in physical prowess until or just prior to the age of puberty, provided they have had the same opportunity for outdoor life and physical exercise. It is not until the girl reaches the age of eight or ten and it becomes undignified, unladylike and tomboyish for her to play and frolic and her natural physical activities are repressed, that she falls behind her brothers in strength and vigor.

Again it has been argued that the development of the peculiar function of menstruation has its influence. If this is true, then the initiation of a natural function becomes a weakness and Dr. Still's dictum that the human body is a perfect machine is incorrect. That there is a predisposition to pelvic diseases in the female is unquestioned—the exact cause of this predisposition is undecided. Many factors are contributing: education, environment, habit and custom or fashion.

As suggested above, the girl has barely reached the age of eight or ten before she is taught to repress her natural, active physical tendencies. No longer can she run and jump and climb trees in active competition with her boy playmates. She has reached the age of "don'ts." As a consequence her entire muscular system fails to reach the stage of development it should reach and that development having attained its normal tone, becomes flabby and to a degree functionless. Circulation becomes less active and energetic. Congestion is the tendency in dependent parts and those parts removed from the secondary aids to venous return. Accompanying this the girl is kept more indoors and therefore loses the benefits of fresh air and thorough oxygenation. With all of this repression of physical activities, the further injustice is done, in that the girl is expected to keep pace with the boy in mental achievements.

Custom lays a heavy hand upon the health of women. She pays most dearly for worship at the shrine of fashion. Shoes and corsets are most responsible for conditions complained of. High heels are unnatural

and the only excuse for their existence is that they make the feet *seem* smaller. In raising the heels there is an increase in the natural lumbar lordosis, the natural equilibrium is disturbed and abnormal tension is brought upon the lumbar and pelvic articulations, ligaments and muscles. This is indeed a functional lordosis, but in time it becomes structural, as does any other curvature, and carries with it all of the disturbances of any structural curvature, not only locally, but to the tissues innervated from the disturbed area.

The foot deformity I will not mention, except to say that if a chilling or a wetting of the feet reacts disastrously upon the pelvic circulation, as we know it does, why should not a cramped and strained foot do likewise? Can any one of you imagine that a fashionably shod foot looks anything like a real functioning foot should or that it is in any way properly enclosed to perform the function of locomotion?

Bad Effect of Wearing Corsets

Corsets have been the text for many a diatribe and execration. We have gotten away from the days of tight lacing with the corset liver and the actual squeezing out of position of the pelvic and abdominal organs. The effects are now less direct but none the less active and baneful.

The waist of the twelve year old girl is usually in a corset of some description, not necessarily tight, but one that despite the fact that the shoulders and the hips expand, prevents the proper expansion of the waist. The advocates of the corset may say what they please but the intention of the contrivance is to make a "trim" waist. The corset embraces the lower ribs—as a rule, they are given an almost perpendicular direction, the circumference of the lower chest is decreased, the attachments of the diaphragm as well as those of the abdominal muscles are disturbed, and they all become relaxed and less active. Breathing is hindered, the aspiratory power of the chest to carry on the venous circulation is lessened, the dependent and valveless pelvic veins become engorged and the pelvic organs congested.

The corset further acts as a splint or a bandage upon the abdominal and lumbar muscles. Did you ever see a woman bend freely and stoop gracefully with a corset on? Again because of relative non-use these muscles lose their tone to a still greater degree, cease largely to become accessory muscles of respiration, and, what is perhaps more important, cease to perform their function of supports for the abdominal organs.

The abdominal muscles support the abdominal organs indirectly but none the less surely. Conceive, if you can, that each abdominal organ rests upon a sloping shelf, from which it has a tendency to slide forward and downward. This tendency is opposed and restrained by the abdominal muscles when they are in proper tone. Render them more lax from any cause and a ptosis of the abdominal contents results. These, in turn, crowd into the pelvis when the ptosis is severe, and even when not severe pelvic congestion is caused by reason of the fact that the prolapsed organs retard the return flow of blood.

So in recounting the iniquities of the corset I would say that it deforms the lower chest wall, interferes with the action of the diaphragm and abdominal muscles directly, as well as in their respiratory functions deprives the trunk muscles of their power of supporting the trunk, and the abdominal organs as well, and prevents their normal activity in all bending and twisting movements of the body. Upon all these things does pelvic circulation depend, and any interference means pelvic congestion and lessened resistance to infection and disease.

I know that it has become more or less popular to speak of these things, in fact their mention has become so common that we pay but little attention to them. Let me ask you one or two practical questions: What percentage of your women patients have some degree of ptosis? What percentage have abdominal muscles of normal tone, especially if they have borne one or more children? What percentage are autotoxic? What percentage have normal power for lifting? What percentage are dependent upon their corsets for support and comfort to their backs?

These things are merely suggested as contributary causes for the great preponderance of pelvic disease in women. As immediate causes, as a matter of course, spinal and pelvic osseous, ligamentous and muscular lesions take first rank. These are found particularly from the ninth dorsal

down and include vertebrae, ribs, pelvic bones as well as all of the soft tissues attached to them. In my own experience lumbar lesions are by far the most numerous; the next in frequency are those affecting the sacroiliac articulations. In addition to these are the many traumatisms and injuries occurring to the pelvic tissues; lacerations, perineal and cervical; abortions; instrumentation, especially curettage. This operation, in my opinion, has no place in gynecology except for the removal of retained products of conception and for this a dull curette should be used.

The symptoms are legion. They may be merely general invalidism with but few localizing indications. Again the pelvic symptoms will predominate and pelvic pain and distress, aggravated by standing or walking; menstrual disturbances, menorrhagia, metrorhagia, dysmenorrhoea will be found. Tenderness over the lower abdomen and backache with pains down the legs are often present. A very irritating leucorrhoea is also frequent. On bi-manual examination there will be found pelvic tenderness, sometimes of extreme degree, fixation of the uterus and usually a mass in the pelvis, either along one or the other tubes, close beside the uterus or behind it. At times the mass seems solid and again it may fluctuate.

The pathology will depend upon the stage at which the trouble is seen, the nature of the infecting organism and the primary point of infection.

The majority of cases come to the osteopath after the condition has become subacute or chronic. In many cases there is perhaps no acute stage, the trouble merely running a slowly progressive sub-acute course. This is especially the case when the gonococcus is the invading organism as it does not tend to a deep invasion of the tissues. In such cases an endometritis extends to the tubes and a salpingitis, with or without a pyo-salpinx or a hydro-salpinx, occurs. The further involvement of the ovary may add an ovaritis to the picture. So long as the uterine end of the tube remains open a collection of fluid in the tubes does not occur but the intensity of the inflammation often occludes the end of the tube.

The tubal walls are usually thickened, at first by edema and later by the deposit of organized connective tissue. The fimbriae may become adherent to the ovary and a tubo-ovarian collection of pus or serum occur. Whatever tissue may lie in contiguity to the inflamed tube with its production of plastic material becomes adherent to it and a conglomerate mass of tube, ovary and intestinal coils, bound together by peritoneal connective tissues is inflamed.

In those cases due to infection during the puerperium, abortions, cervical lacerations or instrumentation, the infection passes through the uterine walls by the way of the blood vessels or lymphatics and expresses its greatest violence upon the connective tissue surrounding the uterus. A cellulitis with abscess formation may occur and often does occur. If an abscess does not form, resolution occurs, contraction takes place in the inflamed connective tissue—cicatricial bands form fixing the uterus in its natural or some abnormal position, and nerves and blood vessels are constricted. In some cases the pus in the abscess becomes sterile, its fluid portion is absorbed and merely an indurated mass remains.

Method of Diagnosis

To diagnose merely "a pelvic inflammation" is usually an easy matter. A diagnosis is not really made until all of the separate elements entering into the inflammation are determined, and the part played by the salpingitis, ovaritis, etc., also determined as they go to make up the general complex. This is often difficult or almost impossible and one must depend upon the history of the case though most largely upon the skill and experience in making a bi-manual examination.

When a salpingitis predominates there will be found tenderness in the tubal region and a thickening of the tube or a mass of exudate, depending upon the severity and extent of the inflammation. The mass of exudate is tender and will fluctuate if filled with fluid, pus or serum. The uterus is usually fixed by the adhesive bands and attempts to move it cause pain. It is hard in these cases to distinctly feel the ovary. When some degree of resolution occurs in the tubes an enlarged, cystic and often prolapsed ovary may be left. Cirrhotic changes may occur in the ovary and as a secondary result of the inflammation and involvement

by exudates it may become much smaller than normal.

The products of a cellulitis are usually found in the pelvis at the location of the connective tissue masses about the uterus. They are found as hard and indurated masses, blending with the pelvic wall, or with the uterus. The uterus is firmly fixed and the connective tissue bands can usually be easily palpated.

As is the case in other conditions the most effective as well as the most scientific treatment is prophylaxis. This means little short of a reformation in the education, customs and dress of our girls. Their days of childhood should be lengthened. Athletic sports should be encouraged. Physiology should be taught as something having a personal application, and to it should be added personal hygiene. Here we have a wise field for the osteopathic physician as a lecturer and as a teacher. Physical culture should be made a compulsory part of the child's life, and they should be made to see that health and efficiency greatly outrank the fads of fashion as things to acquire.

As a matter of immediate treatment the removal of lesions is the paramount issue. This should embrace the entire body and besides the lower dorsal, lumbar, rib and pelvic lesions those of the diaphragm and abdominal muscles should be added. These lesions, primary in origin but secondary in effect, are some times of such long standing that but little can be done for them. Ribs have become permanently distorted, abdominal muscles have been so long relaxed that normalization is well nigh impossible, yet something can be done for them and every effort should be made.

I will not touch upon the matter of extra-pelvic lesions as that is a matter of everyday routine in osteopathic practice. Keep ever in mind the possible pathology in the case to be treated, the collections of serum and pus, the adhesions and the displacements. These may be considered as complications but they are conditions that will remain despite the removal of the extra-pelvic lesions. On the other hand unless the extra-pelvic lesions be removed these can not be permanently cured, as they are results.

Now arises the question of intrapelvic manipulations, its indications and contra-indications. In the presence of acute inflammation it is not to be thought of. By some it is said to be contraindicated by the presence of pus, but I do not consider this to be the case always, for the pus cases are sometimes self-sterilizing, though there is no way by which the sterile case may be determined. In cases of tubal involvement in which the history and the symptoms point to a gonorrhoeal infection the gonococci are said to die in from six to eight to twelve to sixteen weeks. In cases due to puerperal infection, instrumentation or abortion, the streptococci are usually the invading organisms; they produce pus pockets and retain their vitality indefinitely. In these cases the intrapelvic treatment should be given with extreme caution, if at all.

Intrapelvic treatment must in all cases be governed by the history of the case and by the conditions determined by a most careful bi-manual examination and diagnosis.

First National Bank Building.

Technique Measures in Dealing with Sacroiliac Articulation

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I.—ANATOMICAL PHYSIOLOGY OF THE JOINT

A KNOWLEDGE of the normal sacroiliac and sacrolumbar joint is essential to an understanding of the abnormal. We need to know the size, appearance, location and slope of the surfaces of the sacroiliac articulation.

To secure an approximate idea of what the articular surface on the ilium looks like, imagine a small sausage a little less than three inches long and one inch in diameter, bent until it is bow shaped, the convexity of the bow presenting toward the symphysis, the bow string being directed upward and forward and outward. The sausage is also curved in another plane so

that the ends are farther away than the center from the median vertical plane of the body. (See April, 1917, A. O. A. JOURNAL.)

The location may best be thought of in terms of external landmarks:

1. Posterior superior spine is ¾ inch from nearest part of articulation.
2. The most distant part of articulation from posterior superior spine is about 2½ inches.
3. The two superior posterior spines are on an average distance of 3½ inches apart. Joint surfaces one inch farther apart.
4. Approximately 4/5 of joint surface is above a line from posterior superior spine to symphysis.
5. A line from posterior superior spine to anterior superior spine approximately divides the joint surface and passes through the angle where the vertical arm of the joint surface meets the horizontal arm.
6. The vertical distance from the middle of the joint to crest of ilium is about two inches.

Certain signs indicate whether the sacrum has a normal functional adaptation to weight bearing:

1. The pelvic inclination measured by a line through the symphysis and posterior superior spine should be 30 to 40 degrees with horizontal, angle open backwards.
2. The plantar arches should be normal, normal extension at the knee and normal placing of the trochanter, about 12 degrees forward turned.
3. The ilia should have a normal relationship to each other. The crests should not flare too much. The distance apart of anterior superior spines should be 8½ to 9½ inches and the distance of posterior superior spines should be 3¼ to 3¾ inches.
4. The calf and thigh muscles as well as the glutei muscles should indicate normal development.
5. Above the sacrum normality is interpreted by normal antero-posterior curvature and absence of lateral curvature and of distortion of shoulder girdle and of the carrying position of the head.

Mechanism of Normal Sacral Support

The weight of the trunk is transmitted from the lumbar region to the sacrum, from sacrum to ilia and the heads of the femora. Bone transmits the greater part of this weight. The muscles hold the bones in correct relation to each other. Ligaments prevent bone from slipping out of place.

A.—*Bilateral Bony Support of Sacrum.*

1. The ilia underhang, sacrum below, i. e., the ilia are nearer together in the lower part of the joint, so that vertical pressure downward on the sacrum would force the ilia apart. Notice that the sacrum is prevented by its shape from sinking farther between the iliac bones.
2. Posteriorly near the posterior inferior spines the articulating surfaces of the ilia are nearer together than anteriorly, so that the sacrum is prevented by its shape from being pushed backwards.
3. The former means of bony support are operative when the pelvis is in position of normal pelvic inclination. Suppose a person to be sitting on the end of coccyx. In this position the ilia also under-hang the sacrum and resist both vertical and horizontal components of force with bony wedges.

B.—*Function of Ligaments and Muscles.*

Concede the mechanical support by bone, upholding the sacrum as a keystone, then the function of the ligaments and muscles is to hold firmly together the *lower* borders of the articulating surfaces, the ventral surface of the sacrum and ilia.

1. Concerning the ligaments of the sacroiliac joint, Morris in his "Anatomy of Joints" says:

"Ligaments surround the articulation on every side, and cover in the symphysial cartilage. In addition, numerous scattered but strong bands pass between the opposed surfaces of the bones, so as to form a strong *interosseous* ligament. * * * The posterior ligament is of very great strength, and consists of a strong expansion of fibers between the back of the sacrum and the posterior two inches of the iliac crest, in-

cluding the posterior superior spine of the ilium. * * * The interarticular or interosseous ligament is the strongest of all, except perhaps the posterior sacroiliac. It consists of fibers of different lengths passing in various directions between the *rough* (not the articular surfaces) surfaces of the two bones. These fibers are attached alike to the depressions and to the intervening ridge of the sacrum on one side, and to the corresponding portions of the ilium on the other."

The anterior ligament is weak. The posterior ligament is strong and binds together the sacrum and the ilia. Sacrolumbar and iliolumbar also have an effect of binding the innominates together above. The sacrosciatics hold the ilia close to the sacrum around the posterior interior spines.

Because of these ligamentous attachments pressure directed inward at the two acetabular cavities will bring the ventral parts of sacroiliac together. (Pressure at acetabulum would tend to produce a hinge movement on a line through symphysis and sacroiliac joint. Since the separation above this line is prevented by the interosseous ligament the ilia are brought closer together below.)

2. The muscles have a most important supportive function.
   a. The adductors and external rotators of the thigh produce a vise-like pressure on the sacrum.
   b. The levator ani carrying the weight of the intestines, etc., tends to draw the ilia together.
   c. The internal and external, oblique, and transversalis, quadratus lumborum pull the top of the pubis and crest of ilium inward.
   d. The glutei pull the top of the iliac crests outward.
   e. Because of the unyielding character of the posterior sacroiliac ligament these tensions are directed inward at the sacroiliac joint.

Bilateral Movement at the Sacroiliac Joint

A.—*There seems to be very slight movement in a sacroiliac joint possessing ligaments of normal tone, only such movement as is allowed by the elasticity of the ligaments. The evidence follows:*

1. Morris says that after sawing through the symphysis pubis a separation of 1½ inches of the ends can be secured only after a rupture of the sacroiliac ligaments (in the living person).
2. If there is such movement at the sacroiliac as to bring the two posterior spines together we would expect the movement apart of the anterior spines to be much greater. I have carefully measured this distance in a great variety of different muscle tensions and weight bearing conditions. The greatest variation was ⅛ inch and I could not be sure of this even in subjects where ligaments seemed relaxed. There was no increased separation in sitting, standing, and reclining positions nor when subject stood on his head. The following position seemed to give an increased separation: squatting with knees bent and separated as far as possible. Apparently there was a decreased separation when subject is reclining on back with knees and thighs hugged together and rotated internally.
3. There seem to be some means provided by nature for resisting a torsion tending to produce a pelvic twist—provided the ligaments are not relaxed. This effect is probably secured by the sausage-like rotundity of the iliac articulating surface. As this rounded surface begins to slip out of the encasing sacral articular surface it is resisted by a longitudinal pull (parallel to the plane of the joint surface) on the ligaments surrounding the joint. It will be noticed in examining the forward part of the articulation, the vertical limb, that the rotundity is not so great, and the surface is flatter. This partly explains why the forward part of the joint is more likely to slip.
   a. In attempting to do the "split" where one leg is advanced in front and the other put out behind, no change can be detected at anterior or posterior spines.
   b. Raise right foot three or four inches on a book. The ilium of that side comes forward. There is a torsion of the pelvis but the relation of the ilia to each other does not change.

B.—*There seems to be a change in relation of the posterior superior spines in pass-*

ing from body flexion to extension. (Ashmore, p. 128.)

1. Extension of sacrum in prone position causes a pulling out of coccygeal end but at the same time an increase in separation of posterior superior spines.
2. Flexion of sacrum in sitting or standing position causes a protrusion of coccygeal end of sacrum and a decrease in distance between posterior superior spines.

C.—*Evidence of movement in pregnancy, where abnormal relaxation of ligaments occurs:*

1. In extension of the sacrum there is a pronounced increase in the distance between symphysis and promontory of sacrum—indicating probably a pulling back of sacrum with a consequent marked increase in separation of posterior superior spines, due to slope of articular surfaces.

D.—*Evidence of trend of movement in chronic bilateral lesions of sacrum.*

1. Anterior sacrum accompanied by prominent coccygeal end, decrease in distance between posterior spines and increase in distance between anterior spines.
2. Posterior sacrum (with longitudinal axis more vertical), we find posterior spines farther apart, little change in anterior superior spines.

Discussion and Explanation of Movement

While the bony construction and ligamentous and muscle support evidence a purpose to prevent and restrain motion, the existence of a synovial membrane and fluid in the average healthy joint is sufficient evidence to prove a certain amount of movement does take place, *probably only that allowed by the slight normal elasticity of the strong ligaments,* such as may occur in the often repeated acts of walking.

Evidence seems to indicate a variation in distance between posterior spines coincident upon movements of the sacrum. Let us think of this motion in relation to the movements of the ilia.

1. As the posterior superior spines approach each other the coccygeal end of the sacrum becomes prominent. This follows a pull downward (flexion) on the lumbar end of the sacrum. The motion relative to the ilia (which themselves moved in the same act) seems to be posterior along the longitudinal axis of the sacrum and downward in front on a vertical axis. Whether this is an absolute motion of the sacrum downward and backward referring to former normal position of sacrum it is difficult to say.

2. As the posterior spines move apart (in extension of sacrum the coccygeal end sinks between ilia and the base is pulled back), the sacrum seems to move forward and up on its longitudinal axis and the front part up in a vertical direction. The changes in the obstetrical position are similarly explained.

In showing the change which occurs in the relationship of structure when movement takes place, these facts give us an idea of the slope of the articular surfaces of the sacroiliac joint. They indicate that the ventral part of the sacrum is broader than the dorsal, so that as the sacrum is pulled back in body extension it forces the posterior superior spines apart, and as it is pulled forward in body flexion, the posterior spines come nearer together. Let us notice that in body extension the sacrum, without changing its angle of tilt, moves away from the symphysis along a line passing approximately through the symphysis and posterior superior spines, along a line making an angle of 35 degrees to 45 degrees with the horizontal. In body flexion it moves forward and downward on this line. The sacrum does not seem to rotate much on a transverse axis, hence there is really no sacral flexion or extension in the literal sense of the word. In physiological motion it simply slips forward and backward without changing its angle of tilt with reference to the ilia. Remembering the sausage-like bulging convexity seen on the iliac articulating surface when cut by planes parallel to a plane through the symphysis and the two posterior spines, we can understand this accordion-like motion of the posterior spines as the sacrum passes from position it assumes in body flexion and extension. There is probably no gaping of the joint whatever in either of these positions. Practically all the joint ligaments are on a tension, a fairly even tension, and the sacrum moves not simply because of the change of pressure at the lumbar end, but

also by reason of the change of pressure on the two ilia.

If the pressure exerted by a pull on the interosseous ligament tending to pull the ilia together is greater than any other force applied, the sacrum will slip in deeper toward the pelvic cavity keeping its joint surfaces contiguous all the time. If the pressure or pull on the sacrum dorsal-ward exceeds the pressure forcing the ilia together then the shape of the sacrum forces the posterior iliac spines to separate as the sacrum moves backward.

In a bad chronic anterior sacrum the movement downward in the front part seems to have been greater in proportion than it was at the coccygeal and, *giving the effect* of a rotation of the sacrum about an axis passing through the second sacral vertebra. This we must attribute to pathological changes in ligament and bone. In the case of the anterior sacrum, the result of a gradual migration or slipping extending over a period of years, it is erroneous to attempt to explain the movement as we would in a case of body flexion. The latter is a physiological process, the former pathological. The forces tending to move the sacrum are applied at an entirely different angle in the two cases. In the upright position the weight of the body is translated into a backward component of force only in case the ilia are held firmly together in the front lower part of the articulation. The force tending to push the base of the sacrum down is always much greater than the force acting downward on the coccygeal end. Hence in the chronic lesions we may expect to find the base displaced to a greater extent. The change in the position of of ilia relative to each other helps us to see the trend of the sacrum. The posterior spines are nearer together, the coccygeal end more prominent, the flare of the iliac crests increased and the anterior superior spines are farther apart. We have to presuppose contiguity of the articular surfaces and hence evidently the pushing down of the base of the sacrum has spread the anterior spines apart.

In a case of this nature, it seems to me there has been in addition to the sliding backward along the longitudinal axis, also a turning, a rotation of the sacrum with the axis passing approximately through the posterior inferior spines of the ilia. This rotation is not a normal movement. It accompanies ligamentous and muscle fatigue. It is a gradual process involving in many cases an exostosis, as a compensatory reaction on the part of the bone to provide a more secure support for the sacrum. This growth of bone is a clue in explaining the lack of uniformity in the articular surfaces, shown in museums.

This preliminary investigation of the normal sacroiliac, of the possibility of normal bilateral movements, and of the mechanics of support, with the changes produced in chronic bilateral lesions, has a direct bearing on the matter of pelvic twists.

1. *In the first place any theory of movement, bilateral or unilateral, not co-ordinated with a theory of the mechanism of support is incomplete.*

2. *In the second place any attempt at explanation of the pelvic twist without a preliminary satisfactory explanation of the bilateral lesions is incomplete and probably erroneous. The bilateral movement is symmetrical (i.e. simple), the unilateral is not symmetrical (i.e. complex).*

3. *From such a study we may draw correct conclusions concerning the mechanism of what we may term "locking" the joint, practical deductions, which will help in building up the stability of the joint as well as aid in applying corrective technique.*

SLATER B'LDG.

Explanatory Note—This article is the third on the sacroiliac articulation by Dr. Frost. In the April, 1917, A. O. A. JOURNAL he presented a study of the anatomy of the sacroiliac joint. In the July, 1917, issue a paper was published which discussed the effects of incorrect posture on the sacrum. This third paper is in three parts:

1. A consideration of the mechanism by which the sacrum is normally held in position, and a consideration of the possibility of bilateral movement in the normal joint.

2. A discussion of the various pelvic lesions, in particular, the anterior sacrum, the pelvic twist; the relation between the anterior sacrum and the fifth lumbar lesion; the relation between the fifth lumbar lesion and the pelvic twist; and the posterior sacrum.

3. A discussion of the technique problem, including consideration of the mechanism of locking the joint, fatigue lesions, recurring lesions, principle of correction involved in exaggerating the lesion; and the purpose and choice of technique.

It does not aim to present any new manipula-

tive technique. A skilful operator soon acquires the art of joint replacement. He acquires it by a process which in its action is almost entirely below the plane of conscious thought. What we most need in the technique field is some definite basis on which to judge the merits of the technique already in use; some principle which will help us eliminate the crude and unpurposeful measures still in vogue. If the following study simply convinces the reader of the largeness of the problem which the sacroiliac presents and establishes some of the fundamental principles which should guide us in the selection of technique measures, its purpose will have been accomplished.

Parts of this paper were read at the Boston session of the A. O. A., July, 1918.

Paroxysmal Asthma

FRANK N. OIUM, D. O., Oshkosh, Wis.

(*Paper read at the Annual Meeting of the New York State Society, at New York City, Nov.* 9, 1918.)

ACCORDING to prevailing teachings the respiratory center is located in the medulla oblongata, or bulb. But there is considerable evidence on record indicating that the bulbar center is not supreme in the control of respiration, although the fact that it forms part of the controlling mechanism cannot be denied. Thus, division of the cord below the seventh cervical nerve arrests costal respiration; while section below the medulla causes all thoracic movements to cease, removal of the brain *above* the medulla, the supposed seat of the center, does not stop respiration, while cessation of this function occurs when the medulla is removed or extensively injured, save in exceptional cases.

To determine the mode of action of the respiratory mechanism, the influence of the afferent nerves upon the center must be considered. Since the vagus is the nerve of the respiratory tract we should expect it to have an important influence on the center.

Physiologists have told us that section of one vagus causes the respiration to become slower and deeper, but after a time the effect wears off, and the previous rate and depth of respiration are regained. Section of both vagi causes a very marked slowing and deepening of the respiration, which persists for some time, and passes off slowly and incompletely. Separation of the respiratory center from the vagi and upper brain tracts brings about a loss of its rhythmic action, *but does not stop its activity.*

The center owes the rhythmic nature of its action to afferent impulses. These afferent impulses reach it normally through the vagi, but when these are cut the upper brain takes upon itself the function of maintaining the rhythm. The branches of the pneumogastric are distributed to the bronchi; the branches of the great sympathetic are lost in the walls of the arteries.

The fact that the ramifications of the vagus have no connection with the blood vessels introduces a feature of importance in that under continued stimulating, impulses travelling over the vagi cause the muscles of respiration to remain in a spastic state as presented in a paroxysm of asthma. This is due to the loss of the rhythmic control of the sympathetic center in the pituitary, which in most instances will be due to circulatory disturbances caused by atlas or axis lesions, or may be due to the lack of normal stimulation of the sympathetic center caused by adrenal insufficiency, which would be due to a lesion at the eleventh or twelfth dorsal vertebra.

With each expiration a stimulus passes up the vagus which acts upon the inspiratory center to make it discharge. The vagus is thus a true excito-motor nerve, making the center act in a reflex manner. With each collapse of the lung the vagus is thrown into action, as the lungs expand it ceases to act, and, as a result, the inspiratory center stops acting, the muscles of inspiration cease to contract, and expiration occurs.

Sajous gives the following conclusions regarding respiration:

1. "The bulbar respiratory center is not as now believed, the sole, or even the most important center of this class; it is a subsidiary and, probably, a co-ordinating center,

2. "The primary and chief respiratory center is located in the pituitary body and consists of three functionally related centers, the adrenal, vagal and sympathetic centers, which, in turn, are connected by nerve chains with the corresponding subsidiary centers in the bulb, and govern through the intermediary of the latter, the respiratory mechanism."

The chief respiratory center carries on its functions as follows:

Its adrenal center, by governing the production of the adrenal secretions, which takes up the oxygen of the air and forms the albuminous constituent (96 per cent) of hemoglobin, regulates the proportion of this oxidizing substance supplied to the blood.

Its vagal center, acting through the vagus (the intercostals and phrenic) as excito-motor (strict-dilator) nerves of inspiration, provokes contraction of the muscles which dilate the larynx, the bronchi and the thorax, and depresses the diaphragm, thus increasing the intake of air by the lungs, i.e., the supply of oxygen from which the adrenal secretion and the hemoglobin absorb oxygen to distribute it to the tissues.

Its sympathetic center, acting, through the sympathetic nervous system, as antagonist of the vagal center to provoke expiration, causes all the above mentioned respiratory muscles to relax passively (by constricting their arterioles), enabling the larynx and bronchi to resume their normal caliber, the thorax to contract, and the diaphragm to rise, in order to insure the expulsion of the expiratory air laden with carbonic acid.

Sajous says further:

"Stimulation of the vagus causes a marked diminution of the volume of air entering and leaving the corresponding lung, owing to contraction of the bronchial muscles. The manner in which this occurs is with the vagus as a *stricto-dilator* nerve, which means constriction of the vasa vasorum of the arterioles that supply the muscles. The walls of these arterioles being supplied with less blood, they dilate, admitting in turn more blood into the muscular elements. Now we have in its action upon the diaphragm, proof that the vagus causes muscular contraction. Hence the spasmodic contraction of the bronchial muscles which, by greatly narrowing the caliber of the bronchi, provokes the asthma."

From the above analysis of the respiratory function and the clinical evidence, I am convinced that it is correct because the first act of a patient when given relief from the paroxysm is not to exhale a supposed lungful of air, but he will at once inhale a full supply of air and then exhale with a sigh, which is proof that the elevated chest, contracted scaleni and intercostal muscles are simply extreme efforts to force dilatation of the constricted bronchi and permit the entrance of air into them.

Theory of Cause of Asthma

The theory of most writers is that asthma is due to some excitant upon or in the bronchial mucosa or some hyperexcitability of the vagal center in the posterior pituitary body, and this hyperexcitability is most likely due to some lesion of the atlas disturbing the normal nutrition to this center or direct disturbance of the pneumogastric nerve.

As has been shown, the vagus is a stricto-dilator, then if continued unremitting impulses are travelling to the arterioles over the vagus they will remain dilated and engorged with blood which continues the contraction of the bronchioles. Now, then, if we can stop the continuous impulses travelling down over the vagi, the normal impulses travelling through the sympathetic will contract the arterioles and relax the bronchioles, as well as all of the muscles of respiration, which will permit of complete and normal exhalation.

It is quite apparent from the above mentioned functions of the afferent and efferent nerve tracts in the vagus, that the vasodilator impulses travelling down the vagus in an unbroken and continuous flow, due to some unnatural stimulation from above preventing the normal make and break rhythm, so to speak, will continue the over activity of the afferent impulses to the respiratory center. This will transmit a continuous and over-stimulating impulse through the spinal cord nerve tracts to the respiratory muscles and hold them in a spastic state of contraction. The vagus also exercises a trophic influence over the lung tissue, therefore, any disturbance of the vagus will tend to lower the normal vitality and functioning of the lung.

The rib lesions which we so often find associated with asthma are due to the repeated spastic contractions of the respiratory muscles during the paroxysms, and in no way are they the direct cause, but owing to the hindrance to normal action of the chest when such lesion is present, it should be corrected.

Based upon the anatomy and physiology of the lungs and the nerve functions controlling respiration described above, and based upon clinical results, it seems very apparent to me that we must look for some lesion disturbing the normal impulses travelling over the vagus, and this lesion is usually found either between the atlas and occiput or between the atlas and axis.

The treatment for immediate relief of a paroxysm is to have your patient recline on two or three pillows if possible, and while facing the patient place the ball of each thumb posterior to the sterno-cleido-mastoid muscle, posterior to the transverse processes of the axis and third cervical, pushing the muscle and skin forward over the transverse process as far as possible, then turn end of thumb in towards the body of the vertebra so as to get direct pressure over the pneumogastric nerve. Bear in mind that the nerve lies quite close to the body of the vertebra, hence moderate pressure is all that is required, and seldom need it be uncomfortable to the patient. The paroxysm will generally be stopped immediately and the patient resumes normal breathing as soon as you obtain the proper pressure over the nerve. Do not place your thumbs so as to pull the skin tight across the trachia, as it will be very uncomfortable for the patient. If you do not get almost immediate results, it is because you have failed to get direct pressure upon the nerve which is some times a little difficult in a fleshy patient.

The question of a complete cure depends upon the possibilities of removing the upper cervical lesion and upon the extent to which permanent pathological changes have taken place in the over-distended walls of the arterioles and bronchioles. In making our prognosis we must also be very guarded and careful in making our examination of the heart, because in cases of long standing you are very apt to find a dilatation of the right ventricle, which will preclude, to a large extent, the possibility of a complete cure, but after the correction of the cervical lesion the relief will be so pronounced that your case with the heart complication will be well pleased.

Osteopathic Physiology for the Patient

JOHN A. MACDONALD, D. O., Boston, Mass.

(Paper read before the Annual Meeting of the New York Osteopathic Society in New York City, Nov. 9, 1918.)

IN this paper I propose going over a field familiar to every osteopathic physician; the physician's explanation of osteopathy to his patient.

In the early days much of the remarkable progress of osteopathy was due to the rational explanation of its principles and its application to the interested layman by the osteopathic physician. The osteopathic viewpoint fascinated people of unprejudiced minds. Our most enthusiastic supporters were the highly intelligent people of independent thought. These people are still with us and it is time to make osteopathic missionaries of some of them.

The osteopathic physician must invest some time in osteopathic talk. It is hard for a busy physician to talk to his patients, but some very busy ones do it and are well repaid by doing it; they enthuse themselves as well as the patient, and the patient is often heard to ask this question: "How about osteopathy in this or that disease or situation?" Say, "Osteopathy adjusts, Nature cures!" A wonderful slogan. That (with the spine water-marked in the sta-

tionery) is a power in itself, but after "Osteopathy adjusts, Nature cures," then what? There are certain patients who are so interested in your treatment and its result that they want to know more. Such patients should have a careful but simple explanation of function from the osteopathic viewpoint; an explanation designed to make a layman think osteopathically, and consequently talk osteopathically; to stand by osteopathic effort with faith in its principles even when a poor result is known to him, and who will say on occasion, "Osteopathic principles are right; individual failure does not count against those principles."

What material shall we offer to the thought of those patients who wish to know more about osteopathy? Let us say that osteopathic development is in line with the best thought in modern physiology, which teaches that parts should be made to function by securing, primarily, perfection of mechanism; secondarily, exercise by proper use and habit. The osteopathic physician with his work of adjustment of body tissue is the newest and greatest factor in securing perfection of mechanism. An osteopathic physician should never tire of thinking about function from the osteopathic viewpoint in a manner simple enough for explanation to his patient.

In this paper I shall try to give some examples of simple physiology for the consideration of doctor and patient. It really amounts to an attempt to simplify our king study—Applied Anatomy. For the present the lay missionary need not think of the great tracts, respiratory, elementary or genito-urinary, etc. He is more interested in and should have a big fact or two about lungs, liver, intestines and eyes, with some offensive and defensive arguments.

After "Osteopathy adjusts, Nature cures!" comes Head's law: The nerve trunk which supplies a joint, supplies the muscle which moves the joint and the integument covering the insertion of the muscle.

Every patient who wants to know should hear about "Head's Law," and how function is affected by the operation of that law in disease.

Considering the lungs first, most interested people are surprised to hear that the nerve trunks which supply the lung tissue also supply the chest wall, and that when the lung tissue is irritated the chest wall contracts. That in a contracted chest wall we get low oxygen capacity, and that with low oxygen capacity infection is not resisted, and that this is the reason patients die in pneumonia—the more powerful the chest wall the quicker the death unless chest movement is amplified.

We know of no better way of amplifying chest movement than by osteopathic procedure. The whole point here is to make people understand that fixation in the chest wall is dangerous, and that function is slowed down just in proportion to the extent of the fixation.

Now consider the liver from the same viewpoint. The liver is automatically responsive to the impulses set in motion by digestion, preparatory to the final functions of storage and elimination, but after the initial process there is little to keep up action except the response to general body exercise. Most osteopaths practice on the assumption that there is something more than exercise necessary to afford the constant liver stimulation—physical activity should produce deep breathing with greater range of diaphragmatic movement.

What the Lay Missionary Should Know

Now what we should have the lay missionary know is this: The ribs and vertebrae in that part of the chest wall which covers the liver must move freely from the effects of physical exertion or be helped to movment by osteopathic procedure.

"Head's Law" applies here: Partial loss of liver function is not immediately critical, and so the fixation of that section of the chest wall which covers the liver is not ordinarily noticeable; but the rule works just as surely. Exercise helps liver action provided the increased breathing movement moves the ribs and intercostals: otherwise liver action is largely dependent on the poor power of the circulation forced on by a new digestive cycle. Osteopathic adjustment of the structural changes brought about by liver abuse, injury or posture places the advantage of exercise on a totally different footing.

Regarding the intestines, most people know about gastroptosis by this time, and the immense importance attached to it by all therapeutists. It is not all that can

happen to intestines but it is a well known problem. It is a fact that we have something to offer in the curable cases. Most people are willing to concede that supporting appliances are not likely to effect a cure. Rest might, and does, up to a certain point. The link we supply is renewed blood and nerve supply through correction of structure (notably defects in the spine in the lumbar-dorsal region, brought about through reflex contraction, posture, or injury). Any one or all three are peculiarly liable to occur, and most osteopathic physicians have been impressed by the frequent and common lumbar-dorsal lesion. Patients of a mechanical turn of mind—even up to engineers of eminent education—are impressed by the remarkable peculiarity of structure between the twelfth dorsal and first lumbar.

I had one such case which withstood several very crude attempts to relieve a severe sciatica, bowel and bladder trouble, and held his faith through much stupid treatment because he was familiar with the condition and had expectations of relief through the only means—correction of lumbar dorsal. Osteopathy was traduced and cursed in his hearing by his friends who came to see him, but he stuck to his point until he convinced them that osteopahy was right and that if one osteopath could not do it there were others who could.

Gastroptosis cannot be cured if posture is not correct, or nearly correct with fixation, and this joint has a lot to do with bad posture and its correction.

The osteopathic missionary should have that point fixed in his mind by the osteopathic physician and he is probably mechanically inclined enough to be interested in that lumbar dorsal peculiarity or he would not be the one to be selected for a missionary.

As to the eyes, most osteopaths are eager to treat iritis. They all know the significance to them of the pupilo-dilators being located in the dorsal between the shoulders. It is reasonable to say that the basis of gross physiology of the eyes is admission of light—the control of admission of light.

Heart disturbances, stomach disturbances, respiratory disturbances, show an immediate effect on the eyes, and we think that this effect is not all from the center (probably very little directly). The basic effect on the eyes is some variation in the admission of light. The pupilo-dilators are there. They are affected with the other nerve controls in the upper dorsal region. The effect of specific infection on the iris modifies these observations but does not do away with them in the least.

Points to Be Impressed

These points I would impress on the osteopathic missionary:

1st. A large part of the protective mechanism of the eye lies in the normal automatic section of the iris.

2nd. Little defects can be remedied without rectifying by one means or another the control of admission of light.

3rd. Oculists send their patients to the stomach specialist for ocular relief. Many times they need that relief because the stomach nerves and the pupilo-dilators are in the same region. The osteopath aims to see that conditions are righted in that region by securing correct anatomical relation of parts.

Concerning the difficulty of treating parts reflexly connected with inflamed tissue, we all know it is done with good results by some, and with not so good results by others. The difference must be in the manner of application. Abrupt application or abrupt removal of the force used in correction will bring a sharply unfavorable reaction. The bad effect may be temporary, but in cases with limited vitality it is more than temporary to say the least. Gradual application and gradual removal of force is the secret.

We have the best scientific backing for this in the response to stimuli of the muscle-nerve preparation, and we should remember this lesson of the elementary physiological laboratory work, no matter how hurried we are. Nature's greatest adjustable protective mechanism is muscle contracture, and it is a large part of osteopathic skill to be able to modify these contractures under the different conditions without unduly sacrificing the patient's energy.

I have not told you anything new—I did not expect to—but I think that we have patients off and on for years who do not know enough about the principles of osteopathy. I have invested some time in people of

promising missionary tendencies, and it has paid big returns. It is one kind of osteopathic education for the layman.

We must have the layman missionary, and you all have your favorite ways of educating him. What I have said to you describes my favorite way—a little at a time, one point at a time. It enthuses me, and I never tire of emphasizing the big basic principles of osteopathy. "Osteopathy adjusts, Nature cures." We should amplify that big statement with informing comment whenever possible to impress any one in receptive mood. We are apt to think of educating the public as something that must be undertaken in a general way on a large scale but we should not overlook our personal responsibility for the word of explanation from physician to patient from time to time. The general acceptance of this responsibility by osteopaths should constitute a mighty factor in promoting a popular understanding of the osteopathic philosophy of life, an achievement we all recognize as desirable.

160 NEWBERRY STREET.

The Spiritual Challenge of the Times

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(*Address before the Boston Session of the A. O. A., July*, 1918.)

PICKING up my old volume of Tennyson, not long ago, and reading again the immortal stories of King Arthur and his Knights of the Round Table, I thought, how like the challenge which inspired to deeds of valor those brave champions of chivalry, is the challenge which is ringing through the world today. "To redress the wrongs of women and little children, and to cleanse the world of wrong," that was the work to which King Arthur and his men were pledged. And now, into our great training camps here and "over there," (with some already proving their mettle in the trenches), are gathering the bravest and the strongest, the flower of our young American manhood, the Knights of a new chivalry, clad not in armor, but in khaki and in blue, pledging their best, ready to dare their all, upon the sea or in the trenches, to help redress the wrongs of women and little children and to cleanse the world of wrong, to rescue the Holy Grail of freedom and justice and peace.

Patriotism, courage, self-denial, sacrifice, service, are not all of these spiritual qualities? Many of them, like Galahad, seem to have caught the heavenly vision, and to realize the deeper meaning of this warfare in which our country is engaged. Let me tell you of the spirit of one young soldier of Democracy whom I know. A few months ago, in reply to a letter from his mother, asking him if there was anything he needed or wanted for his approaching birthday, and also if he would like to have a box of home goodies for a birthday spread, he wrote:

"You needn't bother about sending me anything for my birthday; there is nothing in particular that I need or want at present, besides, we all want to save our money now and put it into the common cause. The same thing applies to eats, I get plenty of good food, and always have since I've been in the service. Of course, a box from home is appreciated, but I do not think I need one now. Our food must be conserved." From France, under date of April 10th, this lad writes again: "We landed in France just one year from the day that America declared war, for the sake of Democracy and humanity, against the German Imperial Government. It was five o'clock, April 6th, 1918, that we first trod French soil. May we none of us ever leave it alive, until the thing we have come over to do is done, until justice and humanity prevail against the Huns. WE WILL WIN."

This young lad's mother was asked recently how she could keep so cheerful always with her boy in France, and her answer was a fine tribute to her son. She said very proudly, "The spirit of my son

sustains me." An then she added, "I'm trying to be as good a 'sport' here at home as my boy is 'over there.'"

Then if you will allow me, I should like to repeat part of a short address, made by a young American officer to his men on the eve of their entering the trenches. Combined with his disillusioned facing of war's realities, is a wonderful realization of spiritnal values. He said: "You can't be what your officers want you to be; no organization of men ever was, and I know you to be intensely human; but you have not had your 'hitch in Hell' yet. Those of you who feel that the grind is on, army life robbed of its poetry, and warfare stripped of its romance, will shortly learn that the glory of war is not of the body but of the soul. Every impulse of man is against the cruelties and barbarities of war; and it is only the soul that drives men to endure it all for the benefits of a just peace. You are of America's first hundred thousand, not as a matter of chance, but after careful selection of a nation's best. Your country is on trial, and has placed you as its representative; and the trial will require the stoicism of an Indian, the fortitude of a Spartan and the accumulated virtues of all time. You are asked to tread a path never touched by a foot of any of the Fathers. Are you standing up under the test? Are you prepared to do all there is to do, to endure all there is to endure, to fight as only the strong can fight? In modern battle there is no such thing as the inspiration of the moment: As war is now fought, you will be required to produce more strength, determination and courage over a longer period of time, than was ever required of any soldiers in any previous war. When considering this, I doubt if our training is complete. Let us, you and me, commence the training of our individual souls to meet the history-making epoch just before us."

That is straight man's talk, isn't it—challenging the individual soul to test itself in the face of hardship and peril, and to display those virtues that will triumph over physical weakness and pain and fear. Surely, if our boys are going into battle with such thoughts as these, they will prove themselves worthy of their country and her noblest traditions.

The challenge is not alone to the young, strong manhood of our land, it comes to every individual soul, and surely the mothers, young wives and sweethearts who send their boys away with smiles and good cheer, know the deepest meaning of patriotic sacrifice. Don't fear that your boys do not appreciate your courage. To them it is something of which to boast, that you shed no tears when you said good-bye. And "over there," the memory of your smiling face and of your courage, yes, and of your prayers, will sustain your lad in the hour of his temptation, and in that breathless moment when he waits for the signal to go "over the top," to dare his all for you, and for God and for humanity.

Never was there such an opportunity for women to serve as in this present day. The doors of industrial life are open as never before to women, and we will more and more have to take the places of our men who serve at the front. Are we fitting ourselves to do efficiently the work which must devolve upon us?

Osteopathic Honor Roll

With each printing, our honor list of osteopathic physicians and students grows longer; more of our men entering the service daily. We would they might serve our country along the line of our beloved profession, but we know that they will give their best, at whatsoever task they are set, and we shall continue to hope and to work for a proper recognition of our great science. And if more of our men are called into service, and the holding of the home lines is given over to the women of the profession, you may be sure we will uphold the standards of osteopathy with all the best that is in us.

Into the hands of the women of our country are given largely the problems of food conservation. It is comparatively easy for our government to enforce the food laws in hotels and other eating places; but in the private homes it must be a matter of individual conscience. No good American, of course, would be guilty of hoarding unlawful quantities of the sinews of war needed by our army and those of our Allies, but are we doing our utmost, through the use of substitutes, to save for them the commodities most needed, the meat, the wheat and the sweet? Many of our high-school boys, and some of the girls as well, are going out into the country, to join the great army of food producers, the army which is shouting the battle-cry of "feed 'em," but

just as important as food production, is food conservation, and in this service for our country every woman should do her conscientious best.

There is no excuse for idleness in these days when there is so much to be done in the world; the woman slacker is as much to be condemned as the man who shirks his duty to his country. Plenty of opportunity to serve greatly is afforded through the great American Red Cross organizations, and to give of our money to Red Cross and Y. M. C. A., and all the other organizations that are ministering to the needs of our men, and to lend all we possibly can to our Government, in its great Liberty Loan, is to honor ourselves.

On the evening of June 7th, in the Municipal Pier auditorium in Chicago, was inaugurated, by the Woman's Committee of the Council of National Defense, a movement for children's community singing, a great melting-pot movement, to develop in our children of all nationalities, true American ideals, by the singing of songs which express those ideals, so that the children may think of the war, not in terms of battle and bloodshed, but in the spiritual terms of honor and justice and peace, the ideals for which our country is fighting. This is only one little answer to the challenge which comes to us today from the children. They are our citizens of tomorrow, and the future of our country depends so much upon what sort of citizens we are making of them today. So all the organizations which have for their object infant welfare, and the conservation and development of our child life, are great instrumentalities of patriotic service.

And then, there is the challenge of the young girls of our land, the girls whose pretty heads are full of romance, and who see inside of every khaki suit and blue sailor blouse, a hero. Especially in the territories surrounding our great training camps and cantonments is there need for service for our girls: they need the counsel of older women, and I can tell you a little of what our women are doing to answer this challenge. Working under the Fosdick Commission, is an organization called The Girl's Protective Bureau, which deals with the problem of the girls who are hanging about the military camps, and which in its function is corrective. Women of the very highest type, our trained college women, are working through this channel. They have police power, but their object is not to antagonize these girls, or arrest them, but to make friends of them and help them. They help to care, also, for the sad cases of pregnancy among these girls, many of whom are far from their homes and their natural guardians. Another great organized work is the Girl's Patriotic League, instituted by the Woman's Committee of the Council of National Defense. This in its function and aim is preventive, gathering together into organized groups, in high schools and churches, our young girls, and teaching them that the highest type of patriotic service they can render, far transcending the work of knitting or sewing or the making of surgical dressings, is the maintenance among our boys and men of the highest ideals of personal purity and moral character, and that the responsibility for the maintenance of these high standards rests very largely upon the girls and women of the land.

"Our Boys" Will Come Back With High Ideals of Democracy

Our boys are learning, and will learn, "over there," in the soul-lifting experiences of camp and trench, a new standard of values, a fuller and a richer democracy. They will see, in the hour of hardship and danger, the "naked souls of men, stripped of circumstance," and they will learn to value men for the quality of their manhood; not for what they seem, but for what they really are. They will learn new ideals of duty and service, of unselfish comradeship and sacrifice, and they will bring back, when they come home to us, these great ideals, these new standards, and a new and exalted vision of what democracy really means, and as they have fought and suffered to make the world safe for democracy, so they will demand a better democracy, a democracy made safe for the world.

We are not only in the midst of war, we are in the midst of a great revolution of thought and motive, and we need to keep our souls and our minds alert, that we may learn to interpret aright the messages of these great days in which we are living. We need to have, as a nation, a great dream or vision of a great and holy cause. We marvel at the wonderful organization and efficiency of Germany (we have come to hate that word "efficiency" as interpreted

by the Prussian mind), and what has been the inspiration of it all? Germany has had a vision, Germany has dreamed a dream, a dream black as deep night, unworthy, sinister, a dream of world conquest and world domination, through force and frightfulness, shot through with faith in a God created after her own image, a terrible God, who will ask no questions of the German soldier at the Judgment.

And what can conquer a dream but a dream more poignant; what can dissipate the blackness of midnight but the shining of a great light!

Can not we dream a dream, we whose fathers founded this great America of ours upon faith in a just and righteous God, a dream white and shining as the noon-day sun, shot through and through with faith in our father's God, a dream of world conquest? Yes, but the domination of democracy, the true democracy of universal brotherhood and of equal opportunity for all.

As we look upon our country's flag in these great days, our star-spangled banner, which we so love and reverence, let us remember that it stands today, not only for liberty for our own dear land, but for liberty for the world.

GODDARD BUILDING.

Mechanics of the Vertebral Column

F. E. KEEFER, D. O., Summit, N. J.

(Address before the Annual Meeting of the New Jersey Osteopathic Society, Newark, May, 1918.)

A THOROUGH knowledge of the movements of the vertebrae is fundamental to a proper application of mechanical adjustment as a therapeutic agent, and since we, as osteopaths depend almost entirely upon this method for the relief of our patients, it is to be regretted that our knowledge is far from complete on this important subject. It seems strange, with so many patients as we handle each day and have been handling for the last twenty years, and with the innumerable dissections that have been performed since we were established as a school, that we have not more definitely established the mechanics of the column and also more accurately defined the so-called bony lesion and the proper method of diagnosing it.

My understanding of a bony lesion is a perversion of bony structure which interferes with function. This definition is not as elaborate as some and does not attempt to state how that interference is brought about but I think there is no doubt that it signifies to all of us something mechanically wrong, primarily with the joints of the vertebral column. The mechanical condition present is often spoken of as a subluxation, or as a break, by which is meant an undue separation of the spinous processes. Others speak of it as rotation. Many confusing terms are applied to this condition and none of them gives a very accurate conception of the actual condition present or believed to be present. It is the purpose of this discussion to attempt to clear up some of the mechanical problems of the column and I hope each of you may find something of value in it.

First of all, we must have a thorough knowledge of the parts under discussion. Therefore, we will briefly review some of the essential structures with which we have to deal. I take it for granted that you are thoroughly familiar with the structure, form and function of the vertebrae in the various regions of the column, therefore, I will not discuss them. The particular structure that has been passed by with too little thought is the intervertebral joint, commonly referred to as the intervertebral disc. This is supposed by doctors generally to have been placed in this particular spot by an All-wise Providence for the especial purpose of acting as shock absorber, preventing undue jarring of the spinal cord or brain.

As the structure of this joint is of very great importance, I will outline the essential elements that constitute it and point out

as fully as possible the movements provided for and wherein they differ from those commonly supposed to exist. The essential structure of this joint aside from the bodies of the two adjacent vertebrae, is a fibrous ring composed of white fibrous and yellow elastic tissue enclosing a semi-fluid or pulpy center. This center, as stated in Bulletin No. 4, of The A. T. Still Research Institute, consists of a thin semi-gelatinous material, milky in appearance and gives most of the reactions of cartilage. It is bi-lateral in structure and strongly hydroscopic as shown by the swelling which occurs when placed in one of several solutions. Swelling occurs most speedily and to greatest extent when placed in slightly acid solutions—a fact to be borne in mind when dealing with spinal curvature which is so often associated with acidosis.

The Bulletin further states: "This neucleus pulposus is enclosed within very strong layers of fibrocartilage consisting of white fibrous and yellow elastic tissue so that it remains under very high pressure. When the disc is cut through, the pulpy material emerges upon the knife with considerable force. It is impossible to replace the pulp in the cavity from which it emerges, for it is impossible to provide sufficient pressure to force it into the small space after the restraining walls have been cut."

In discussing the physiology of the disc it is further stated: "The neucleus pulposus being of a semi-fluid material subjected to strenous compression tends to force the bodies of the vertebrae apart, while the fibrous outer layers of the disc tend to hold the bodies of the vertebrae more strongly approximated. The ultimate results upon the spinal column is to give it joints with a ball bearing action throughout its length. * * * Being semi-gelatinous the globular form of the disc neucleus pulposus is modified with the changing position of the vertebral relation, while being under pressure it still compels the separation of the vertebrae to a normal extent."

I have quoted thus extensively from this authoritative source because it is the best discussion of the structure and function I have seen. It confirms the statement made by me in 1916 before the Florida Osteopathic Association that the neucleus pulposus, rather than the fibrous part of the disc is the real support of the vertebra above with its superimposed weight.

I think the expression "ball bearing" as applied to this joint is ill chosen, as it is in no sense a ball bearing joint. Rather it is in function, if not so definitely in structure, a ball and socket joint, and I have always referred to it as a ball and socket joint. The structure of this joint differs so markedly from the classical ball and socket joint as represented in the shoulder and hip that it is not at first apparent how the function could be the same. When we stop to consider the determining factors of a ball and socket joint, however, we will find that they are present in the intervertebral joint. The "ball" as represented in the shoulder joint by the head of the humerus is here represented by the neucleus pulposus, while the socket is provided by the enclosing ring of fibrous tissue.

As you know, fluid looses very little of its volume under pressure, if the temperature remains constant, therefore this globular mass has the same mechanical action as would a small ball if placed between two vertebrae. That the neucleus pulposus is the real support of the vertebra above and is not compressible to any appreciable extent is readily shown by taking two or more vertebrae with all the spinal ligaments intact and subjecting them to vertical or longitudinal pressure when it will be found the fibrous part of the disc is not impinged upon until after the pulp has escaped—usually through a fissure in the body of the vertebra.

The functions of such a joint, as we have shown this one to be, are so well known to us that were it not for the erroneous instructions we have had I would consider it a waste of time to discuss this phase of the subject further than to say that flexion towards any point of the compass is provided. Curiously enough the movement, rotation on a vertical axis, commonly supposed to be especially provided for in the dorsal region, does not exist. This, perhaps, is a startling statement to many of you, but a careful examination of the vertebrae in motion with ligaments attached and indicators arranged will show, even in side bending, rotation does not normally occur, but the bodies side-tilt, without rotation, on the incompressible pulpy center in such a way as

to carry the region above in the direction of flexion. We will find in side bending, that the tip of the spinous process has moved from the mid-line towards the opposite side, a fact which has led observers to conclude that rotation of the body has occurred. If we remember the support of the vertebra is in the body and that the spinous process is some distance away, and further, that in the dorsal region, if it is placed at an acute angle to the body of the vertebra, it will be apparent that any side-tilting of the body of the vertebra as I have described would displace the tip of the spinous process to the opposite side.

We have been taught that one type of movement, rotation, is characteristic of the dorsal region and another type of the lumbar region and have pointed out the different types of articular facets as conclusive evidence of this. I wish to say that so far as the spinal joints are concerned, the same type of movement is provided in both regions, and differs only in degree, and that is due to the supporting and adjacent tissues.

A large part of our osteopathic manipulations have been based on a wrong conception of the mechanics of the column, due to the fact that our deductions were drawn from the structure of the bones when stripped of all softer tissues, and when the intervertebral joint had been replaced by a piece of felt. We have approached this subject with our minds filled with the writings of incomplete texts, and further have accepted without question statements made by Cunningham, Gray and other anatomists, that in the dorsal region rotation is provided for by the direction of the articular facets, while in the lumbar region it is not possible because the nature of the facets prevents it.

No doubt much of the difficulty in showing the existence of the osteopathic lesion by x-ray has been due to the fact that we were trying to show a disturbance of the articular facet—an undertaking which has not been attended by the degree of success a critical mind would demand to establish beyond controversy the common existence of such conditions.

If our roentgenologists will begin to make skiagrams of the bodies of the vertebrae with the column placed in four or five different conditions of flexion, extension and side bending and then compare the changes which occur in the relation of one body to another, I believe a long step forward will have been taken to establish the existence of the osteopathic lesion and its association with certain diseases.

Statistics from the Epidemic

The questionnaire sent to members of the profession for reports on the results of their work with the epidemic of influenza and pneumonia has had a fair response. The results are most remarkable, and when the profession reports, even fifty per cent of the cases treated, the tabulations are going to open our eyes and the eyes of our friends. The thing is, we ought to have reports from all who treated these cases, and no doubt all who do any bedside practice had at least a few cases.

What is needed is the great number of cases cared for, with the general results. It is not the star cases, but *all* the cases—the volume of the work done. Therefore Dr. Riley is going to send to each member again a form and an appeal for a report on these cases. The response to the first blank and the remarkable results reported, when averaged and compared with results under drug treatment, encourages us to hope that several thousand of the profession will report tens of thousand cases when the matter is brought to them again. While you think of it, dig up that blank which we sent you, if it was not filled in and mailed to Dr. Riley at once. If the new one reaches you before you find the one sent you some weks ago, use it, but send a complete, careful report of your cases as promptly as possible.

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EDITORIAL

REORGANIZATION

At the last annual meeting, the Board of Trustees ordered the appointment of a committee to draft a new constitution and by-laws for the A. O. A. This committee was organized with C. A. Upton as Chairman, and he has since been studying the many amendments proposed for adoption at the Boston meeting, for the information they give of the ideas the members have of what changes should be made. These amendments, it will be recalled, were not adopted at that meeting, the Board recommending that a thorough revision was desirable rather than patching up the present law.

This committee is now facing an arduous task, for while it is no small job to write the constitution and by-laws, the task is really difficult because the committee finds it hard to learn what the members want. Therefore, Dr. Upton asks the JOURNAL to announce that any member and every member who has a well-defined idea on the subject write him and give him the benefit of it. This is the most important undertaking assigned a committee by the Association in many years, hence the committee does not want to write the law according to its ideas, but according to the ideas of the membership. The work of this committee represents practically that of a constitutional convention and as such it ought to have suggestions from hundreds of members. The committee will welcome these suggestions. Are the members interested in the profession that is giving them such splendid opportunities, or are they indifferent to what this committee reports?

The committee asks that these suggestions be made early so that they can be given full consideration, and permit of correspondence where it is called for, harmonizing of differences where possible, and formulating a report to be considered previous to the meeting. Give the committee some big ideas. What is there in the present organization that is wrong? What is the remedy? These are the points on which the committee wants to have expressions from the member.

In order to start the discussion the JOURNAL wishes to give one answer to the questions just asked and suggest a remedy. The presentation of a new plan will give the members the opportunity of deciding between this and the present by-laws which are radically different. The A. O. A. can never do its duty as regards the big problems of the profession as long as it has to do all the detail work of the profession and conduct correspondence with the individual member on every subject that comes up. We had an example of efficiency in the working of the recent Draft Law. If one wrote to the Department at Washington, he received a printed form that all inquiries must be made to the local board. If the local board could not give the information wanted, it would inquire of the Adjutant General of the State, and, if necessary, that officer would inquire of the Department at Washington. Up to the present a too

great part of the A. O. A. work has been detail work, much of which each State Secretary is likewise doing. Much labor and expense are thus duplicated.

This can be remedied by a union of the district, State and National organizations, each doing its part of the work. To effect this means that the membership must be the same in all organizations. At the present time the A. O. A. membership exceeds by perhaps 1,000 the total membership of the State societies. This fact, of course, means that the member feels that A. O. A. membership is worth much more to him than membership in his State organization. This is natural enough, considering the publications of the A. O. A. and listing in the National Directory. But it does not mean that he is justified in failing to support his State society. Hence, if membership in the A. O. A. were made contingent upon membership in the State Society, practically all the States would tend to gain in members and in the course of a few years all the States would have a much larger membership on account of the pulling power of the A. O. A. There would first need be uniformity of constitution and by-laws of the several State organizations and of the State organizations with the A. O. A., and one of the duties of the committee will be, if this affiliation idea is adopted, to report a skeleton of by-laws for State organizations as well. For the reason just mentioned, it would be to the interest of the State organizations, with one or two exceptions, to at once join in this uniformity plan, for its membership would be increased and its expense and effort at maintaining its organization would be reduced.

Let us consider the work done and the work which should be done by the National and State organizations. The A. O. A. has now four departments, Education, Publication, Finance and Development, and Public Affairs. Each of these is directly under a trustee who is thereby a member of the Executive Committee. It may be profitable to consider each of these in detail and see what corresponding activity there is for the State organization.

The Department of Education of the A. O. A. includes two distinct features—one the education of the student, the other securing students for the colleges. This last feature, recently known as the Forward Movement, needs the co-operation of each State organization. There is no reason why the State should not be interested in the definite educational phase, but the State organization, representing the individual practician, must assume as a part of its duties the interesting of its members in sending students to our colleges. A certain proportion of young people each year are going to study for the practice of the healing art in some of its phases. We can get our share. We can make our share what we work for—of these capable young people. If we don't secure them the prestige of regular medicine on the one hand and the unscrupulous advertising of our imitators on the other will get them. Hence, each State needs a Bureau or Committee on Education.

The Department of Publication may or may not need a corresponding activity in the State organization. The A. O. A. Department has large interests on its hands. The JOURNAL, the *Osteopathic Magazine*, and several of its educative publications represent valuable assets, and they will become much more valuable. The Association must assume public education as a part of its duties to the profession, and the preparation of a literature for the purpose is essential. As to whether the State organization wishes to interest itself in this work is for the State organization to decide.

The Department of Finance and Development is the newest of the A. O. A. departments, but it is one of the most important. This is an activity that has to do with increase of membership, preparation of budget, and watching the finances of the Association. Co-ordinating the finances of the National and State organizations is a most important consideration. Likewise, there must be harmony in the

membership efforts, so the State organization needs a member in charge of this work.

The Department of Public Affairs consists of several Bureaus or Divisions. —State Legislation, National Legislation, Public Education, Public Health, Clinics and Statistics. There should be a live corresponding activity in each State for each of these bureaus. Nothing that the Association has done in recent years has so contributed to building up osteopathy as the work of several of the bureaus. If each State and every district in the State will take similar action and appoint earnest members in charge and give them the organization support, wonders will be accomplished. The sphere of activity of each of these is too well known to require further discussion.

Now, let us discuss the means or mechanism for making this work in a practical manner. The Executive Committee of the Board of Trustees of the A. O. A. consists of the chairmen of these four departments, together with the president, immediate past president and secretary, ex-officio members. Now, if the State organization were similarly organized, and its officers, president, vice-president, and directors were assigned to head the work of one or more of these departments and bureaus in the State, we should have a basis for co-operation and efficient prosecution of the work. As long as we are not thus organized, and the A. O. A. department or bureau chairman secures the consent of a member in each State to be named as representative of that work in that State, it goes without saying that the State appointees do not feel the responsibility they would feel if their duties and appointment were a part of the State organization. This would likewise give the State a compact organization and give each officer and director or trustee a definite work to do or supervise.

It is our suggestion that there should be district societies in all States where the profession is grouped so that meetings are practical. We suggest that when the A. O. A. by-laws are drawn up, that a form of organization be presented for adoption by each State organization which may vote to affiliate with the A. O. A. This, of course, would contain the essential features of the affiliation only, and each State would adopt additions for its own needs. If affiliation is provided for between the State and the A. O. A., the by-laws of the A. O. A. should state that affiliation shall become operable when a definite number or part of the State organizations have adopted the by-laws provided by the A. O. A. which should include organization of district societies in States with a given number of members. The reason for this is that as the A. O. A. department or bureau chairman should not be required to send communications to each member in the profession on the work of his department or bureau, but should reach them through the corresponding State department or bureau, so in the larger States, at least, the work should be further divided so that the officer or trustee in charge of each department or bureau would not be required to work through the entire membership of the State, but through the chairman of that Bureau in the several district societies, and perhaps through the members in the district in which he lived. That is, he might be the district representative of his work in his own district.

Further regulation of the time of payment of the dues in the several organizations should be considered. At present A. O. A. dues are payable June 30, an unfortunate date for collection of dues on account of vacations. Two months earlier would be much better. Then the fiscal year would end before the annual meeting which now is not always the case. If the fiscal year of the A. O. A. ended with March or April and that of the State organizations with October, collections would be much easier, and placing them six months apart would suit members much better. The State dues might include the district dues or the district dues might be payable January 1.

Under this plan efficiency could be

secured because a much larger number of persons would be working and the burdens would be more evenly distributed. It would likewise cost less to administer the affairs of the organization. The State secretary would be the officer to co-ordinate the work of the several departments and bureaus in the State. If he collected the dues he should have some compensation for maintaining his office. A salary schedule should be worked out and included in the State organization by-laws, that the secretary of an organization of such a size should receive so much per month or year, and so on up for an organization of several hundred members. In this way only can the State organization or directors hold a secretary to account for the work of his office, and too much depends on his work not to hold him responsible for its faithful performance. The dues of the National and State Association might be jointly drawn on for the secretary's compensation, as he would be contributing to the success of both the National and State work.

Perhaps an affiliated or federated membership of National, State and district organizations might be brought about, if desired, without much change in the A. O. A. constitution and by-laws. At least two efforts have been made within the last ten years for a form of co-operation in the several organizations and a degree of uniformity of State organizations. It is now evident that unless our work is to continue disjointed, and unscientifically done, that a full co-operation must be worked out.

But there is yet another relation which might be established which would greatly strengthen the combined organization. For many years suggestions have been made for making of the A. O. A. a delegate body. Time and again effort has been made to get conferences of State representatives at our annual meetings, but with only fair success at best. The States have been asked to send delegates for specific purposes, as to nominate officers. Apparently, none of these seem to justify the State in sending the delegates or to justify the delegates appointed in attending. This is all done to get as much conference and exchange of opinion as possible to divide the responsibility of the Board of Trustees and in the selection of officers to give the opportunity for every part of the country to have a voice in suggesting those who have shown ability and willingness to serve.

If the A. O. A. is to become a delegate body and if the States are to be integral parts of it, in other words, if the National is to be the sum total of the State organizations and these in effect State divisions of the A. O. A., then the sensible thing is to make the combined organizations of the State societies the organization of the National. Let the Council of Delegates or the House of Delegates or whatever the business body of the A. O. A. is to be called, be composed of the officers elected by the State societies. As to basis of representation, let the president of each State organization, serving at the time of holding the A. O. A. annual meeting, be the representative of his State for transaction of the business of the Association. States which have more than fifty members (or any other number more or less, which might be agreed on) would be represented by the secretary in addition to president, and for every fifty members additional another officer or director would be added as the representative of the profession in that State. If preferred, instead of increasing the number of delegates, the president could be given votes in proportion to the members in the State. This would have the advantage of reducing the size of the delegate body. The advantage of the other would be the getting together for discussing the work to be done by the officers and directors from the State organization who are to head the several lines of work in the State. By making the State officers the business body of the National the members in electing their officers would be electing their representatives in the National, and hence would be casting their votes on all

matters coming before the National body, so the State bodies would be merged into the National body and each member would act through his chosen representative. This could not be equally true if president or directors named a delegate or delegates.

The delegate body would be the business body of the profession. It would elect officers, and if the present form holds, elect four members to head the four departments who with the president immediate past president and secretary, would constitute the Executive Committee for the transaction of business between sessions of the Association. The Executive Committee might meet two or three days before the annual meeting of the delegate body, prepare reports of all departments and bureaus and its annual report to the association, and these, including the financial budget, would then be presented to the delegate body for consideration, modification and adoption.

This would have the very great advantage of making those who are doing things in the State organization the business men and women of the National body. This body would plan for the advancement and establishing of osteopathy and these representatives would go out to take charge of the several phases of it in all the States. Just what would be left to the Executive Committee and just what would be required of the Executive Committee are details which could be worked out from time to time.

No doubt there are objections to that plan. Perhaps it can be improved upon. It will at least open up the subject by proposing a radical change which the members can consider and discuss with Dr. Upton and the members of this committee.

President Fryette suggests that a constitutional convention, to which the States shall be urged to send delegates, be held in Chicago just previous to the meeting. This would be after the work of the Committee on Constitution and By-laws had published its work and every State had had the opportunity to study the plan proposed by the committee after it had considered all suggestions and objections raised by the members. Chairman Upton will report in an early issue of the JOURNAL the practical suggestions made to and by the members of his committee to stimulate discussion and suggestions.

The weak point in the above plan is the lack of efficiency in many of the State organizations. The most capable men and women in many of the States are not active in the State organization, hence, under this plan of making the official list of the State organizations the body of the National organization would not get the best material. Appointment might get better representatives. On the other hand, if the States realized that their organization was the organization of the National body in the State and the only such organization, State work might appeal to the best men and women, and the members of the State society would see the importance of electing their workers to office and not passing offices around as compliments. It will be admitted by all that although appointment of delegates might bring to the delegate body better men and women, it is not a union of the State and National body to the ex tent as is the plan suggested of having those elected direct by the profession become the component elements of the National body.

A word in regard to the representation might be of interest. One delegate for each State, and one additional for each 100 members, would make on the present membership basis a body of about seventy delegates from the States. If the basis of representation were for each fifty members rather than for each 100 the number of delegates would be increased to about ninety members, and if each college were given a representative and if officers or trustees or executive committees were not delegates, the body would consist of at least 100 members.

It should be understood that the plan outlined in this article is not one which the board or even the writer of it will urge for adoption. It is given here as the

most radical and thorough-going revision that could well be made. As such it will stand out against the conservative plan in operation and provoke discussion and give the members a better opportunity by comparison of extremes.

INVESTING IN YOUR OWN BUSINESS

Physicians are notoriously easy marks. It is said of them that as a class they fritter away more money without getting returns for it than any other body of people. Most physicians of all schools of practice are not students of finance, and the chances against them in speculative ventures are very great and their opportunities for becoming acquainted with investments outside of life insurance, are limited. Hence, when the solicitor comes in, or in response to letter or anouncement in newspaper, the physician makes the venture, the odds are many hundreds to one that he will never see his money again, and he is lucky if he does not send more good money after this bad money with never a return from any of it.

The reason for the fact that thousands of dollars are thus thrown away by our profession each year is that the average one of us has a small amount in cash each month which he can spare and which he thinks is not worth placing in permanent investment at a low rate of interest, hence he "takes a flyer" with it, expecting at least some of his ventures to make a "hit" and give big returns. He figures that because he has made several such ventures and lost, there is the more reason why if he keeps up a little longer luck will turn and it will be his time to win. His income being meager and his reserve laid up for the education of his children or for his old age being small, he feels that he must make some easy money.

Now, as far as the osteopathic profession is concerned, the returns from a good practice will meet the reasonable needs of any practician. The income from a busy practice may not be great—it will not make a man or woman rich (practice of the healing art is not the work for one whose object is money), but it will give him a competence. Those who do not make a good support for their families out of the practice of osteopathy are either not comfortably busy at their practice or they fool away their money.

We wish to see each osteopathic physician imbued with the high ideals of service and unwilling to lower his standing for the sake of getting money. While it is true that financial success does not mean professional success, it may mean the reverse, at the same time financial failure, particularly in a representative of a new system as ours, is apt to be counted as a professional failure and reflects unfavorably on the profession and the system of practice as well.

It is likewise true that indifference to financial returns from practice, which makes a physician appear unsuccessful, is no evidence of his skill nor of studious habits, nor of his interest in science or therapeutics. The osteopathic physician who is kept reasonably busy by the people of his community, who is able to live well, who takes his place in the welfare of his town and is able to respond to the calls of charity, is a respected citizen who is a credit to his profession. The profession has a right to wish this success for each of its representatives and to use its efforts to see the greatest possible number of them secure this return for their labor.

We said above that the earning power of the average osteopathic physician who is kept reasonably busy in his professional work should be sufficient to meet his needs. Therefore, as the year closes and as we begin to plan for the new year, we want to urge upon the profession that instead of first investing outside that they first invest in their profession. Let us invest our spare time in a searching study of osteopathy. Study the body articulations as a means of applying technique. And, further, invest in educating the community that osteopathy is a comprehensive system of health and therapeutics.

No investment will pay as well as the time spent in making oneself competent and the money spent for the *best* means of educating the public.

It cannot be denied that education of the public, or even advertising, pays. It is a shame, but true, that the advertising doctor of whatever school, finds that advertising pays. It is true that members of our own profession who have used questionable literature, or printed matter, in great quantities, have found it most profitable. In estimating results they take account of the effect it had on bringing to their offices people whose sensibilities were not shocked by it (there are many such in all communities), and fail to take note of the harm done by disgusting the class in the community whose interest should have been first considered and enlisted. If printed matter, such as we refer to, sent indiscriminately, pays big returns, the investment of a reasonable sum each month in the best educative literature obtainable and sent in such a manner as to leave no doubt that it was sent for educative purposes and not primarily to induce the person receiving it to come for treatment to the office of the person sending it, will prove the best investment an osteopathic physician can possibly make.

Take it as a monetary investment, what will pay so well as your own time profitably employed in your practice? The average osteopathic physician can work on an average of from six to ten hours per day without injury to himself if he is physically fit and takes proper care of himself. What will pay the osteopath better than this time spent in caring for people who have been educated to expect much from osteopathy? Surely, any right-thinking physician would prefer to make a competency for his needs through the practice of his profession, rather than be inactive in his profession and make money through the stock market or speculation or any outside source. This is no preachment against investment or even speculations, but it is an appeal to us to consider the interest of our profession first and not to neglect developing it for the earning of money outside of it.

Besides, is there not a duty placed upon us to educate our community where we live, in the smaller cities and towns, and educate our own patients where we live in the larger cities? No use to deny that in most parts of the country the average person has more respect for the "regular" physician than he has for the physician of any non-drug school. That is to say, the "regular" has a prestige not accorded others. Recognition of him by State and municipality is partly responsible, but the mysticism of drugs and the belief that the drug doctor has a much superior education or that his system is much more far-reaching is perhaps more responsible for his being placed on a pedestal.

This impression still exists in the public mind because of our failure to correct it. If the educational system in our colleges is as broad as it is in the medical colleges, if our entrance requirements are what they should be, we fall far short of our duty if we don't make these facts known. If there is any admiration for the man who is trained in the probable action of drugs which is not accorded the physician who knows the anatomy and physiology of the human body and by skilful use of this knowledge is able to make the body do what the man with drugs cannot make it do, it is because the profession has not done its duty along broad educational lines. It is here that our public education has failed. If we would grasp this thought, that if our profession is not respected as the drug systems are respected when the efficiency of the two are compared, it is because we have been seeking to draw people to us for treatment rather than seeking to educate them regarding osteopathy as a system of health maintenance and health restoration, we would soon see the importance of the campaign we are urging on the profession.

We know of an osteopathic physician

who in a town of 5,000, by educating that community with high class literature, not only receives about $10,000 per year in fees, but he is invited to address schools, church organizations, etc., because he is recognized as an accomplished physician and useful citizen. That man could not possibly have invested the money he used in high class literature to so good advantage in any other manner.

The Bureau of Public Education has recently sent the profession an earnest appeal to educate the public as a professional duty, as well as for selfish interest. It stresses the use of the *Osteopathic Magazine* and the Woodall Book. We would add Dr. Webster's Book, Concerning Osteopathy. This is all high-class literature which will give the reader a comprehensive view of osteopathy. That is what is needed, a comprehensive view, not only as a system of therapeutics, but as a helpful force in making-over the world and building up men and women for the next generations. Let each one of us select the literature that appeals to him as best suitable to his field and use it liberally the coming year. We invite a careful consideration of the letter just sent out by the Bureau of Public Education.

PEACE

Much earlier than the preparations made by the Government contemplated, the enemies of our country have sued for peace, and the Great War may be considered as virtually ended. Mingled with the joy that this wanton destruction is stopped will be the feeling of regret that as a profession we have not been allowed by the medical authorities to aid in caring for the sick and disabled. Congress has listened to the Surgeon General, as it seemed evident it would do, and declined to assert itself in the face of the argument of the Surgeon General to allow him to provide all Army surgeons.

While the work of destruction is over the work of reconstruction has barely begun. Every boat from Europe brings back its thousands and the seaport cities of the East are already filling up with wounded and convalescents. Many of these are purely surgical cases, but what has osteopathy done, where it has had the opportunity, to supplement surgery and hasten convalescence? Many others are not surgical cases at all, but the result of shell shock and from exposure of six to eighteen months on the firing line. The Government has announced that it will not discharge these men until all that medical knowledge can do for them has been done. This means that many thousands of them will be kept in Army hospitals for months or years.

The only objections raised by members of Congress to enacting the measure we seek have now been removed and the need—the necessity—for it still exists. The fight at Washington to pass the measure in the Senate and House should be kept up vigorously. Our friends who took an interest in the letter-writing campaign a few weeks ago and those who did not become active in that should all now be urged to press that measure upon their Senators and Representatives for the benefit of the reconstruction work, as well as for the care of the million or two soldiers who will be kept in the Army for a year or more to come. Congress will be in session from December 2 to March 4 and this session should see the Senate or House bill enacted, and give the soldier who took every chance to save his country the opportunity to use the best means and all reasonable means for the restoration of his health.

Peace means peace of mind and relief from anxiety and hope of food and clothing to millions of others. But it means heartache and disappointment, also. The casualty list just sent out from Washington carries uncertainty to thousands of our homes, for it tells that at least two hundred thousand of our boys have been killed or wounded above the list of names reported.

Yet this is small compared with the suffering that must be relieved in Europe. While our benevolences may well

begin at home, they must not be limited to home, nor indeed must we turn deaf ears or unwilling hands to the starving women and children of the countries which have recently been at war with us. Peace has increased rather than decreased the demands for help and benevolence. We hope each of us helped our city and town to go "over the top" in the recent call to "give" for our soldier boys. We hope, too, that we are giving liberally to the Red Cross and the Salvation Army in the efforts to aid the stricken in Belgium or Serbia or any other country where disease will surely follow dearth of food and clothing. America may deal with her enemies as they deserve, and to insure no return of war, but our country must be generous in feeding the starving and clothing the needy, and we must each take a leading part in arousing this feeling in our community as well as in setting an example of saving that others may have food and clothing.

Throughout the war, the osteopathic profession has done its work nobly. Its members—unlike those of some cults, according to reports—have subscribed to Government loans freely and have been active in raising and giving to the funds for the comfort of the soldiers. The replies to the questionnaire sent out by the president of the A. O. A. last summer showed their support of these enterprises. There has been no sulking and no withholding support from the Government because we were not given the opportunity to serve, which those who are familiar with our work believe we should have had. Hundreds of our number, duly qualified to serve as physicians, have gone uncomplaining into the trenches. They are not gaining professional experience from their service as the medical men are doing, but withal we have accepted it as one of the burdens of the war. Now, that the war is over. we can appeal with force to Congress to right the wrong done by the medical profession.

We want the help of every member in completing our honor roll. We should take a pride in this. We should have credit for it, and especially the men who went in should have credit by being properly listed. For the families of any of our number who have made the supreme sacrifice we should see that they have the gold star properly placed upon our Service Flag. As soon as the records are complete the Service Flag should be rearranged to show the number who entered the service as well as those who gave their lives, and kept as our permanent record. The Honor Roll is printed in this issue and perhaps for the last time. Will not readers of the JOURNAL take a pride in helping us to make it complete and correct for our permanent records?

Dr. Upton Honored

At its recent annual meeting the Rotary Club, of St. Paul, elected Dr. C. A. Upton its president. Dr. Upton had served the club the past year as chairman of the Entertainment Committee, and evidently he did his work well, as promotions in this business organization is only on the merit system. Dr. Upton is a past president of the A. O. A., serving for the year 1914-15, and at present is chairman of the important Department of Finance and Development.

Several osteopathic physicians are finding excellent fields for their abilities in the Rotary and Kiwanis Clubs. Most cities of 25,000 or 30,000 have one or both of these organizations, and capable osteopathic physicians are not discriminated against. On the contrary, in many of the clubs the osteopathic member occupies a commanding position, as in the case of Dr. Upton in the St. Paul club, and Dr. C. E. Achorn, president of the New York Rotary Club, while Attorney Patterson, of the A. O. A., is president of the International Organization of Kiwanis Clubs, and Drs. H. M. Bowers, of Albuquerque, N. M., and Miles Williams, of Nashville, Tenn., are members of the Board of Directors. In cities where these organizations exist and an osteopathic physician

has not been invited to membership the osteopathic organization will be glad to take this up and aid having the profession represented.

As an evidence that it is worth while for osteopaths to work in these organizations, recently the Rotary Club and the Kiwanis Club, of Providence, R. I., held a joint special meeting to consider a question very close to our profession. A prominent members of the Kiwanis Club of that city had had a brother in the Army who contracted pneumonia. The young soldier had been a victim to the disease before and recovered under care of an osteopath, so this brother urged upon the medical

Dr. C. A. Upton.

officer of the camp that he be allowed to have an osteopathic physician see this brother. The medical officer objected, but the brother persisted until an appeal was made to Washington; pending ruling on the point the soldier died.

The brother got a joint meeting of the two clubs, as the Rotary Club had already adopted the resolution printed herewith, and a live protest was made by prominent business men represented by these two clubs.

"We ,the undersigned, parents, relatives and friends of men in the service or subject to draft, hereby earnestly petition your favorable consideration of the Osteopathic Bill, H. R. No. 5407, and S. No. 4914, in order that the services of osteopathic physicians may be available to them while in the service of their country."

Copy of the resolution and petition was sent to all other Rotary clubs with the request that similar action be taken. Dr. C. H. Wall is the member of the Rotary Club and Dr. S. L. Gants of the Kiwanis Club of Providence.

The Osteopath and General Practice

To the Journal of the Osteopathic Ass'n:

In one of the late issues of the JOURNAL there was something about the osteopath and general practice.

I would like to give one or two reasons why there are so few in general practice, especially in the Northwest.

First—We have no support in surgery or hospitals.

Second—The M. D. will not consult or assist.

Third—The surgeon from the county seat will not come because he will make the M. D. in your town sore, and of course that will hurt the surgeon.

Fourth—It is a hard place for an osteopath when the families you are treating should want another doctor, and the M. D. will not come with you on the job. I could write a book of my experiences.

The M. D. since the war started is 100 per cent worse than he ever was. He is about as small as anything I ever came in contact with. I have been in general practice since 1906, and it is a hard job not to have any help when you need it.

And I will say this. The D. O. will never cover the general field of practice unless he is a surgeon, or has support from an osteopathic surgeon in the county seat near where the general practician can get him, and that is a long way off, because he will not come to such places, for he knows he cannot get in the hospitals.

These are some of the reasons the D. O. take up medicine. Can you really blame him?

T. G. BURT, D. O.

Progress in Application of Osteopathic Concept

In this day of rapid development and progress along the lines of invention, business, stock and plant breeding and scientific research, one is indeed blind who cannot see the necessity for bumping elbows with his fellows who have been pursuing special study in limited fields. The day is past when one can sit back on a soap box by the stove in the country grocery store, shift his cob pipe to the other side of his face, spit in the ash box, and solemnly say "It can't be did," when some new achievement is announced. The impossible is being accomplished every day, and in no field is that more true than in the field of medicine. The laboratory has disclosed hitherto unknown secrets about the etiology of disease. History will record that this decade has brought scientific treatment of disease more nearly to actu-

ality than ever before. Everyone in our profession should have his or her eyes and ears open to see and hear new things. This cannot be done by staying at home and reading a few periodicals, although they will help.

He who thinks that his knowledge of the treatment of the sick cannot be improved upon and that he needs no enlightenment as the years come and go, is sadly like our soap box friend in the grocery store.

The osteopathic school of medicine gave the world a new fundamental principle in the conception of human disease. The "soap box" men of orthodox medicine sat back and said "it can't be did," but it "has been did." The sum total of the application of that fundamental principle was not known twenty years ago, and is not known to-day. We are progressing in our knowledge of how to apply osteopathic concept, but much is yet to be learned. Already we are developing "soap box" members in our own profession, who look askance at the suggestion of anything new in osteopathy, and yet there are new things. There are many developments, chiefly from research laboratories that compel us to revise our ideas about the diagnosis and treatment of many diseases. To shift our pipe, spit and say "it can't be did" does not alter the facts.

Perhaps the largest single development is the etiological relation of ear, nose and throat defects to general health. It is imperative today for the general physician to know this relation. This is why there should be a large attendance of general practitioners, as well as those specializing in ear, nose and throat diseases at the meeting of the American Osteopathic Society of Otology and Oto-laryngology, the week immediately preceding the American Osteopathic Association Convention at Chicago next year. I do not mean that all osteopathic physicians should become ear, nose and throat specialists, but I do mean that every osteopath should know how the ear, nose and throat specialist can help him to succeed. Stiff neck, lumbago, sciatica, brachial neuritis, rheumatism, appendicitis, gastric ulcer, pyo-salpinx, pyo-nephrosis, bronchitis, ordinary colds and a score of other diseases *should not be treated by any general practitioner of any school of medicine without consultation with and the co-operation of an ear, nose and throat specialist.* Now I hear a chorus of protests. Aha! more belong to the "soap box brigade" than I thought. If you don't believe the above statement attend the lectures and clinics the week before American Osteopathic Association Convention at Chicago and see if you haven't overlooked something.

W. V. Goodfellow, D. O.

Los Angeles.

Ravages of the Influenza Epidemic

The influenza epidemic has thus far taken a much heavier toll of American life than has the Great War. The total loss of life throughout the country is not known, but the Bureau of Census has been publishing, for forty-six large cities having a combined population estimated at 23,000,000, weekly reports showing the mortality from influenza and pneumonia. These reports, which cover the period from September 8 to November 9, inclusive, show a total of 82,306 deaths from these causes. It is estimated that during a similar period of time the normal number of deaths due to influenza and pneumonia in the same cities would be about 4,000, leaving approximately 78,000 as the number properly chargeable to the epidemic.

The total casualties in the American Expeditionary Forces have recently been unofficially estimated at 100,000. On the basis of the number thus far reported, it may be assumed that the deaths from all causes, including disease and accidents, are probably less than 45 per cent, and may not be more than 40 per cent of the total casualties. On this assumption the loss of life in the American Expeditionary Forces to date is about 40,000 or 45,000.

Thus, in forty-six American cities having a combined population of only a little more than one-fifth the total for the country, the mortality resulting from the influenza epidemic during the nine weeks' period ended November 9 was nearly double that in the American Expeditionary Forces from the time the first contingent landed in France until the cessation of hostilities.

For the forty-six cities taken as a group the epidemic reached its height during the two weeks ended October 26, for which period 40,782 deaths were reported—19,938 for the week ended October 19 and 20,844 for the following week. Since October 26, however, the decline has been pronounced. During the week ended November 2, 14,857 deaths occurred, and during the following week only 7,798. The only city in which the number of deaths reported for the week ended November 9 exceeded the number occurring during the previous week was Spokane, Wash.

In general the epidemic traversed the country from east to west. In a number of eastern cities—notably Boston, where the greatest mortality occurred during the week ended October 5—the largest numbers of deaths were reported for earlier periods than that which covered the height of the epidemic for the forty-six cities taken as a group. On the other hand, in New Haven, New York, Pittsburgh and Rochester the maximum mortality

occurred somewhat later than in eastern cities generally. In Baltimore, Buffalo and Philadelphia the two weeks' period ended October 26 showed the greatest number of deaths. For the entire nine weeks' period the greatest mortality due to the epidemic, in proportion to population—7.4 per 1,000—occurred in Philadelphia, and the next greatest—6.7 per 1,000—was reported for Baltimore.

Arrangemens have been made for the publication in the January Osteopathic *Magazine* of a symposium on the results of osteopathic treatment of influenza. A questionnaire sent to physicians in different sections of the country has brought a remarkable showing of their experience and the summary, will be an interesting contribution to the progress of osteopathic procedure.

Collecting Statistics of Hay Fever

It is my desire to get statistics on hay fever from all over the country, and I am asking every one who has been treating hay fever for the last three or four years to send me the name and address of a number of their patients and give me permission to write to them asking them the following questions: How many seasons have you had hay fever? What treatment did you receive and when? Have you been cured of your hay fever? Have you been partially relieved? Did you get no benefit from the treatment? No doctors' or patients' names will be mentioned in connection with the statistics. The report will be made at the American Osteopathic Society of Ophthalmology and Oto-laryngology at Chicago next summer. It should be the desire of every one to help in collecting these statistics. Kindly send me the name and address of all patients as far as possible that you have treated, regardless of results, whether you know whether they have been benefited or not. This will help me to make up statistics that will be valuable to us.

C. C. REID.

DENVER, Col.

Free Surgical Care for Osteopaths

On behalf of the A. S. O. Hospital at Kirksville Dr. George A. Still announces that from now on any osteopathic physician or student who has been in the Government service, either Army or Navy, and requires any surgical service of whatever nature, whether due to war injuries or not, will be cared for free during the next two years at least.

This action is simply a follow-up of a former announcement offering free service to osteopaths in Class B, but which is of no further availability because the war is ended. This former announcement was as follows:

"The A. S. O. Hospital also wishes to announce that any osteopathic physician in the whole country, whether a graduate of the A. S. O. or not, providing he is a graduate of a reputable osteopathic school and who has been placed in Class 1 (B), (deferred for physical defects), can be operated upon at the A. S. O. Hospital free, and his room, board and care will be free. All he needs to do is to present his credentials from his local board and demonstrate, if required, evidence of his osteopathic standing."

This new announcement is to make clear the purpose of the hospital to take care of the boys "After the war," and to let them know that their alma mater is for them.

"Chiros" in Montana

In Montana it requires relatively but a few signatures to initiate a measure. Last summer the necessary petitions were quietly circulated by "chiros," who had been prevented from practicing because they refused to meet standards and by hired circulators for a bill to license "chiros." The proposed measure was grossly, even fraudulently, misrepresented by some of the petition's circulators or the small number of names required would not have been secured. It was shrewdly calculated that the measure would have a good chance to slip through while the public mind was intent on war matters.

Also two other measures were to be voted upon that had been put up to the people by the Legislature, and both of these were meritorious and popular and endorsed from one end of the State to the other. They will carry by a vote of probably three to one. Carried along with these there are possibilities of the "chiro" bill having slipped through by a few hundred votes. Nineteen out of twenty who voted for the "chiro" bill knew nothing whatever about it, but just assumed that like the other two measures it was all right or it would not be up Not a paper in the State supported it editorially, and a number exposed it. Those who voted against the measure knew why, but with a population so scattered as that of Montana it is hard to reach the voters.

Owing to the "flu" epidemic only about half of the voters voted, and as not all of them voted on the bill if it carries it will be by probably less than one-fifth of the voters of the State. The most effective material used in behalf of the "chiro" measure was the ill-advised editorial comment of the *Osteopath* of Kansas City, probably a factor sufficient in view of the circumstances of small vote cast and closeness of count to decide the issue in favor of the "chiros." The count is not all in.

ASA WILLARD.

"Chiro" Convicted in Baltimore

One Frederick Thon, a "chiropractor," was recently convicted in the Criminal Court of Baltimore for practicing osteopathy without a license. Sentence was suspended, however, pending motion for a new trial. The Judge gave it as his opinion that if any "chiropractor" treated other than the spine he was violating the law.

It will be recalled that the "chiros" got an amendment to the osteopathic act exempting "chiropractors" from its provisions, but the belief of competent attorneys is that the amendment is not constitutional except where the "chiro" is a graduate of a school which maintains a course of study equal to that maintained by the osteopathic colleges, and in prosecuting the "chiros" the osteopathic profession is working along that line.

This is unquestionably logical. Where there is an act provided for the practice of osteopathy it covers the practice of "chiropractic" in every particular except name, and if there are those in the State practicing osteopathy under some other name it should be up to them to establish the fact that they have met the educational requirements set up by law for the practice of osteopathy, otherwise there are two sets of practicians in the State doing the same class of work and practically enjoying the same legal protection, one having met the educational conditions provided for by law, and the other having met no standards whatever.

Dr. R. B. Keiningham and those associated with him in Maryland deserve much credit for the success they have met with thus far.

"The Kiros"

"When you hear a fellow osteopath express sympathy for the kiros and say that they are only having the same trouble the early osteopaths had to secure legal standing," says the Bulletin of the Texas Osteopathic Association, "you are listening to some enemy propaganda of the vilest sort, and you should nail it and choke it. Kiros have attempted to steal the basic principles of the teachings of Andrew Taylor Still and take a short-cut to fame and glory. They are not trying to pull themselves up by their own bootstraps, neither are they trying to raise their standards of educational qualification. Hark not to this siren song, my brother, but do your little bit and help maintain the present standards. The Board of Examiners for Texas invited every kiro who could qualify to appear before the board and take the regular examination the same as other practitioners, but how many came for examination. Not one came up to show that he or she possessed the qualifications necessary to minister to the afflicted. Yet these very fellows would try to appeal to the sympathy of our legislators at Austin and make it appear that we had a stone wall around Texas, and that the Medical Trust and Osteopathic Trust were keeping kiros from saving the lives of many sick and afflicted in Texas. Nail the lie, fellow laborers; nail the lie.

"From all over the country the past winter has brought reports of defeat for kiros both in legislative halls and in the courtroom where they were being tried for practicing medicine or osteopathy without a license. The slogan for the Texas Chiropractors' Association is, 'Liberty in Texas.' The association has recently sent out letters to the membership showing that they spent in Texas from December, 1916, to December, 1917, a total of $4,783.60, and they have a fund on hand of $16.37 for the securing of their liberty."

HONOR ROLL

The following members of the osteopathic profession are now in the war service of their country. Home addresses are given in parenthesis and the camp address follows.

Co-operation of JOURNAL readers is desired in maintaining the completeness and accuracy of this list. Those having relatives or friends in the service are requested to send information for record here.

Adams, Ned (Edward), (Dodge City, Iowa), 148th inf., Camp Sheridan, Ala.

Albright, J. B., Aviation Corps, San Antonio, Texas.

Alexander, Dr. I. W., Medical Corps, Goat Island, San Francisco, Cal.

Alexander, J. R., Navy, Co. C., Norfolk, Va.

Alexander, Louis B., Co. D, 35th Eng., A. E. F., France.

Allison, J. S. (Los Angeles, Cal.), Y. M. C. A. war service.

Ames, Allen P. (Burlington, Vt.). Hospital Corps, Fort Ethan Allen, Vermont.

Ammerman, T. W., Co. J, 7th Reg., Camp Perry, Great Lakes, Ill.

Anderson, J. K., U. S. Rifle Range, Annapolis.

Archibold, L. F., U. S. Naval Dispensary, Hoboken, N. J.

Aten, Rex G., Fourth Officers' Training Camp, Camp Dodge, Iowa.

Atkinson Donald A. (Swanton, O.), Detention Bat. 15, Co. 12, Camp Greenleaf, Ft. Oglethorpe, Ga.

Atkinson, Floyd, Co. G, 351st Infantry, Camp Dodge, Iowa.

Auberle, F. V., Camp Merritt, N. J.

Bagley, R. A. (Moyock, N. C.), San. Det., 116th Inf., Camp McClellan, Ala.

Bagwill, Lisle, Field Hosp. 157, Camp Kearney.

Bailey, Donald A. (Detroit, Mich.), Bat. A, 329th F. A., American E. F., France.

Bailey, Walter E. (St. Louis, Mo.), Lieut, 342d Infantry, Camp Grant, Rockford, Ill.

Baird, B. D., Co. G, 315th Infantry, Camp Dodge, Iowa.

Baker, Guy S., 29th Training Battery, Field Artillery, Camp Taylor, Kentucky.

Baker, W. H., Field Hospital, Camp Beauregard, La.

Baldwin, B. B. (Jefferson City, Mo.), Lieut. 358th Infantry, Camp Funston, Kan.

Balmat, David W. (Carthage, N. Y.), Tank Corps, Camp Colt, Gettysburg, Pa.

Barham, G. Stanley (Chicago, Ill.), Medical Corps, Camp Grant, Rockford, Ill.

Barnes, Dr. S. D., Camp Beacon, Calexico, Cal.

Baronidis, Royal. On ward duty, Camp Lewis, Wash.

Barr, Guy L., Med. Dept., Navy, 2418 Woodhaven Ave., Woodhaven, L. I.

Barrett, G. W., Sergeant Field Medical Supply Depot, Co. 3, American Expeditionary Forces.

Barrett, H. L. (Portland, O.).

Barstow, Byron B. (Dorchester, Mass.), 32d Co., 8th Bn. Depot Brigade, Camp Devens, Mass.

Bassett, V. C., Training Station, Urbana, Ill.

Beaton, Dr. Hugh, Fort Oglethorpe, Ga.

Beattie, Miles Herbert, Detention Bat. 15, Co. No. 12, Camp Greenleaf, Ft. Oglethorpe, Ga.

Beatty, Chas. H., Co. B, 4th Reg., Camp Perry, Great Lakes, Ill.

Beaumont, C. H., Base Hospital 93, Camp Lewis, Wash.

Becker, A. F., Personnel Office, Div. Bat., Camp Meade, Md.

Beeman, George M., Gen. Hospital No. 18, Waynesville, N. C.

Bell, Chester E. (Magnetic Springs, O.), Fifty-seventh Squadron, Bay Center, Washington.

Bell, J. H. (Sandusky, Ohio), Jefferson Barracks, Missouri.

Benedict, Dr. A. W., 324th H. F. A. Supply Co., Camp Sherman, Ohio.

Bernhardi, L. A. (Jamaica, N. Y.), Medical Corps, 306th Infantry, American Expeditionary Forces, via New York.

Berry, Russell, South Armory, Boston, Mass.

Betts, W. E., Sergeant Ambulance Co. No. 33, 4th Div., Camp Greene, Charlotte, N. C.

Bibelow, Gordon, Co. E, 162d Inf., Div. 41, France.

Bigsby, Frank L., Capt., Medical Corps, Fort Oglethorpe, Ga.

Birtles, J. Earle (Doylestown, Pa.)

Blackington, F. S.

Blaisdell, F. Gardner (Allston, Mass.)

Boatright, Bernard D., Aviation Corps, Camp Gordon, Atlanta, Ga.

Bolmer, J. E., Med. Dept., 153d Infantry, Camp Beauregard, La.

Bondhus, T. B. (Chicago, Ill.)

Bordsen, T. L., Lieut., M. O. T. C., Ft. Riley, Kan.

Boulware, Milton T., Co. 8, Camp Pike, J. A. R. D., American E. F.

Bowman, C. Howard (Gouverneur, N. Y.), Medical Corps, Base Hospital, Camp Lee, Petersburg, Va.

Boyd, Nathaniel W., Aviation, Flying, U. S School of Aeronautics (awaiting call).

Boyden, Charles A., American E. F.

Boyer, W. Brent, Quartermasters' Corps, Camp Joseph E. Johnston, Fla.

Brayton, F. C., 11th Co., Sanitary Detach., Ft. McArthur, San Pedro, Cal.

Broadbent, Sidney R. (Los Angeles, Cal.), Base Hospital Omaha, Neb.

Brown, Norwal E. (Winchester, Ind.), in service overseas.

Browne, Louis E. (Kirksville, Mo.), Med. Dept., Gen. Hospital No. 14, Fort Oglethorpe, Ga.

Brownell, Frank (Excelsior Springs, Colo.). Capt. Heavy Field Artillery, Jefferson Barracks, St. Louis, Mo.

Brunsman, A. R. (Grandview, Ill.), 7th Co. Eastern N. Y., Fort Totten, N. Y.

Buck, H., Second Lieut., Tank Corps, Camp Colt, Gettysburg, Pa.

Buckingham, J. R., Camp Lewis, Wash.

Buckman, R. F., Camp Lewis, Wash.

Bueler, Dr. Eugene L., Medical Dept., New Orleans, La.

Burbank, J. Y., Army Med. Training School, Washington, D. C.

Burdett, Fletcher H., Medical, Navy.

Burkhart, E. M., Ellington Aviation Field, Quartermaster's Corps, Houston, Texas.

Burns, Marion L. (Los Angeles, Cal.), killed at Mather Aviation Field, Sacramento, Cal., Aug. 22.

Bush, Dr. Earl A., Barracks 50, Base Hospital, Camp Hancock, Augusta, Ga.

Bush, F. Louis, Hospital A, Camp Jackson, S. C.

Bush, Leroy A. (Jacksonville, Fla.), Medical Corps, Fla. National Guards.

Caldwell, Roy L., Co. G, 356th Inf., Camp Funston, Kan.

Calisch, Harry F. (Richmond, Va.), No. 116 Va. Coast Artillery, Ft. Monroe, Va.

Campbell, H. H. (Portland, Me.), Base Hospital, Camp Dodge, Iowa.

Card, Geo. B., Aviation Flying, U. S. School Aeronautics.

Carle, Robert L., First Lieut., 131st Machine Gun Battalion, Camp Bowie, Ft. Worth, Texas.

Carlin, W. R. (Dwight, Ill.), 44th Co., 4th Inft., Rep. Reg., Camp Gordon, Ga.

Carr, William H., Co. 3, Casual Det. 155, Depot Brig., Camp Lee, Va.

Carroll, L. J. (student), Medical Dept., 122d Reg. Field Art., Camp Logan, Houston, Texas.

Carson, A. B., U. S. N. T. Station, Balboa Park, Cal.

Carson, E. J. (Fayetteville, N. C.), First Lieut. Co. H, 322d Inf., Camp Jackson, S. C.

Carter, J. M., Lieut., Quartermaster's Corps, Camp Wadsworth, Spartanberg, S. C.

Cash, Byron ,(Des Moines, Iowa), Medical Corps, Fort DesMoines, Iowa.

Cathcart, Dr. Nelson H., Infirmary 14, 356th Infantry, Camp Funston, Kan.

Catron, Lee R., Radio School, Barracks 721, Co. J, Camp Perry, Great Lakes, Ill.

Chaplin, Arthur W. (Thomasville, Ga.), Sgt., Med. Dept., Post Hospital, Fort Morgan, Ala.

Charles, Raymond L., Medical Corps, Camp Dodge, Iowa.

Clark, Everett, 410th Sqd., Vancouver Bks., Vancouver, Wash.

Clark, G. D. (Gouverneur, N. Y.)

Clark, Raymond (Syracuse, N. Y.), X-Ray School, Washington.

Clark, R. F., Base Hospital No. 1, Ft. Sam Houston, Texas.

Claverie, Jean Baptiste, care Richard Magnus, 28 Rue d'Hauteville, Paris.

Cleary, C. Stuart, Battery A, Tenth Battalion, Camp Jackson, S. C.

Cole, John D. (Champaign, Ill.), Coast Artillery Corps, Ft. Worden, Wash.

Collinge, P. T., Co. A, 316th U. S. Engineers, Camp Lewis, American Lake, Wash.

Compton, Cecil S., U. S. N. Recruit. Station, 318 Un. Oil Bldg., Los Angeles, Cal.

Conway, H. J., Yale Armory Laboratories.

Cook, Charles C. (Saginaw, Mich.), Base Hospital 105, Section E, Hosp. Group, Camp Greenleaf, Chickamauga Park, Ga.

Cooke, Herbert T. (Dayton, O.), General Hospital, Fort Bayard, New Mexico.

Cowger, R. H., Camp Funston, Kan.

Cox, F. William (Springfield, O.), Camp Sherman, Chillicothe, Ohio.

Craig, Archie, Reed Army Hospital, Washington, D. C.

Craig, William A. (Grove City, Pa.), Walter Reed General Hospital, Washington, D. C.

Crain, O. R., Med. Detachment, 351st Infantry, 88th Div. American E. F.

Cramb, A. B., Lieut., Med. Dept., Ft. Riley, Kan.

Craven, Dr. Jane Wells, Centre Hospitalier B, Sector Postal 8, Sonilly Meuse, French Army, France.

Crocker, D. C. (Centralia, Wash.). With Y. M. C. A. in France.

Crookshank, I. A. (Albert Lea, Minn.), Surgical Sec. K, Ft. Riley, Kan.

Crum, J. W. (Plant City, Fla.), Columbia, S. C.

Crusen, Greggs (Grinnell, Iowa), Camp John, Columbus, S. C.

Cummings, W. S. (Lakewood, N. J.)

Cunningham, Malcolm, 1st Lieut., Fort Benjamin Harrison, Ind.

Cunningham, Russell P., Ward No. 4, U. S. Naval Hospital, Portsmouth, Va.

Currie, Wm. P. (Montreal, Can.), C. A. M. C., T. D. No. 4, Can. Expeditionary Force, Montreal, Quebec, Can.

Curry, R. E. (Farmer City, Ill.)

Dakin, Russell S. (Fredericton, N. B.), Co. 45, Battery 12, 153d D. B., Camp Dix, N. J.

Dalrymple, C. A., Camp Funston, Kan.

Dangler, Joseph H., Co. E, Barracks A, Hospital School, Great Lakes, Ill.

Davidson, Frank, Reg. 361 Infirmary, Camp Lewis. Wash.

Davis, E. E., Sergeant Bugler, Headquarters Co., 210th Engineers, Camp Funston, Kan.

Davis, Harry L., Barracks A, Co. 2 D, Hospital School, Great Lakes, Ill.

Deeming, Paul, 1st Lieut., Aviation Corps, Chicago, Ill.

De Lario, Dr. C. E. (Cleburne, Texas).

Deming, Edw. C., Co. D, 162d Inf., 41st Div., France.

De Muth. L., Med. Dept., Base Hosp., Camp Kearney.

De Sart, Roy F., Army Y. M. C. A.

Dickinson, D. S. (Des Moines, Iowa).

Dilatush, Frank A. (Lebanon, O.), 1st Lieut. 147th Infantry, Camp Sheridan, Ill.

Dobson, Harry C. (Forest City, Iowa), A. S. S. C.. Medical Dept., Plot 3, Camp Sevier, Greenville, S. C.

Dodge, P. J. (student), Malden, Mass.

Dowdall, L. V., Infirmary M. O. T. C., Camp Greenleaf, Chickamauga Park, Ga.

Drennan, Q. L., Med. Dept., Walter Reed Hospital, Washington, D. C.

Dunn, D. G. (Granite Falls, Minn.), enlisted in Hospital Corps.

Dunning, John J. (Westbrook, Me.), Y. M. C. A. service overseas.

Dyer, L. Q.

Eades, J. B., U. S. N. Operating Base Hospital, Hampton Roads, Va.

Ealey, William S., Camp Funston, Kan.

Eccles, Chas. M., Aviation.

Eddy, Guy G., Med. Dept., 122d Reg. Field Artillery, Camp Logan, Houston, Texas.

Edwards, A. P., Co. 36, 164th D. B., Camp Funston, Kan.

Edwin, E. S., Medical Infirmary, 346th Field Artillery, Camp Lewis, Wash.

Elkins, George S. (Vermont). No. 2,098,882, 12th Canadian Field Amb., B. E. F., France.

Elvins, Richard.

Elliott, Walter B., O. T. C., Atlanta, Ga.

Ellis, O. D., Headquarters 164th D. B., Camp Funston, Kan.

England, Victor (Des Moines, Iowa), Medial Corps, Fort Des Moines, Iowa.

Engler, Ned (Clay Center, Kan.), Cavalry, Regular Army, Honolulu, T. H.

English, L. H., Capt., 48th Infantry, American E. F.

English, Ray (Newark, N. J.), Base Hospital No. 48, Fort McHenry, Md.

Engstrom, T. F. (Marysville, Cal.), unknown.

Epperson, U. M., 363d Inf., 30th Co., 8 Bn., 166th Depot Brigade, Camp Lewis, Wash.

Erwin, M. J. Serg., Sec. 603 Army Ambulance Service, A. E. F., with Italian Army Force, A. P. O. 901.

Evans, C. B., Med. Aviation, Gustner Field, Lake Charles, La.

Evans, H. Walter, Aviation, Non-Flying, U. S. School of Aeronautics (awaiting call).

Farmer, Frank C. (Chicago, Ill.), Capt. Medical Corps, U. S. Army.

Farquharson, Chester L., Camp Dodge, Iowa.

Farrell, Clarence E., 143d Field Artillery Band. 40th Div., Camp Kearney, San Diego, Cal.

Feidler, Leo G. (Seattle, Wash.), Laboratory Dept., Base Hospital No. 50, Camp Fremont, Cal.

Forster, H. E., Co. B, 4th Tr. Reg., Barracks 101, Camp Pike, Ark.

Foster, S. D. (student), Med. Dept., 122d Reg. Field Art., Camp Logan, Houston, Texas.

Fuller, Justus L., Hosp. Corps Training School, Naval Training Station, Newport, R. I., Barracks 5.

Gahan, Dr. E. J., Mare Island Navy Yard, San Francisco, Cal.

Gano, Chas. H., Military Hospital No. 1, Neuilly-Sur-Seine, France.

Garmroth, K. W., Co. B, 351st Infantry, Camp Dodge, Iowa.

Garrigues, L. L. (Spokane, Wash.). Was commissioned a major before leaving for service in France.

Gaudy, P. B., Aviation School, O. T. C., Champaign, Ill.

Gercke, George A., Ordnance Dept., Camp Meade, Md.

Gibbs, Stephen B. (Conn.), Sergeant Medical Unit, Camp Hancock, Augusta, Ga.

Gibbs, Selwyn, Medical, Navy.

Gillum, G. N. Co. I, 351st Infantry, Camp Dodge, Iowa.

Gillum, N. W., Naval Training Station, Great Lakes, Ill.

Gilmore, Geo. I., Sanitary Troop, 356th Inf., Camp Funston, Kan.

Gockley, C. I. (Wenatchee, Wash.), Base Hosp., Medical Dept., Camp Lewis, Wash.

Goode, J. L., served 3 mo., dismissed, Camp Kearney.

Goodfellow, John, Aviation Section, Signal Corps, Rockwell Field, San Diego, Cal.

Gorrell, H. A., Co. 1, 164th Depot Brigade, Camp Funston, Kan.

Gorsline, J. R., Med. Corps, Fort Oglethorpe, Georgia.

Gould, Harold E., Serg., killed in action in France July 16.

Grace, James J., U. S. Navy.

Graham, Claude (Lake Preston, So. Dak.) Co. E, Fourth Pioneer Inf., Spartanburg, S. C.

Grapek, Charles, 42d Co., 11th Bn. Depot Brig., Camp Devens, Mass.

Gray, H. V., served 3 mo., dismissed, Camp Kearney.

Green, Russell (Washington, D. C.)

Gregory, Roger W. (New York City), Hospital Corps, Setion Base, Cape May, N. J.

Griffith, Dr. Fred V., Great Lakes Naval Training Station, Chicago, Ill.

Gripe, Otto H., Hosp. Corps 325th Field Artllery, Camp Zachery Taylor, Ky.

Grise, Harry M., Base Hospital, Camp Sherman, Chillicothe, Ohio.

Groenwood, Andrew S., Aero Field, San Antonio, Texas.

Grossman, S. L. (Ridgway, Pa.), Camp Lee, Petersburg, Va.

Grua, O. T., 4th Squad., A. S. S. C., Camp McArthur, Waco, Texas.

Guilbert, S. C., Barracks 125 South, Co. F, Reg. 1, Camp Dewey, Great Lakes, Ill.

Gumbert, J. E., Co. M, 4th Engineer Training Reg., Camp Humphries, Va.

Hain, Harold S. (Sedalia, Mo.), Camp Funston, Kan.

Hall, Horace A., Ambulance Corps, 315, Camp Meade, Md.

Hall, H. H. (student), Ambulance Corps, 314, Campe Meade, Md.

Halladay, John E., Jefferson Barracks, St. Louis, Mo.

Hancock, C. P., U. S. Navy.

Hannah, R. F. (third year student Chicago college), Base Hospital, Camp Fremont, Palo Alto, California.

Hanson, Harold S., Co. E, First Reg't., Camp Dewey, Great Lakes, Ill.

Hardie, D. H. (Galena, Ill.), Med. Dept., 342d Inf., Camp Grant, Ill.

Harding, S. O., Co. B, 351st Infantry, Camp Dodge, Iowa.

Hardy, W. T., 18th Co., Medical Corps, Fort Oglethorpe, Ga.

Harker, Glenn L., 1st Lieut., General Hospital No. 13, Fort Sam Houston, Texas.

Harper, John W., Aviation.

Hart, Ray C. (Lamonia, Iowa), Yard Dispensary, Mare Island, Cal.

Hartford, B. C., Co. C, Bar. 627, Reg. 6, Camp Perry, Great Lakes, Ill.

Harth, C. P., First Lieut., Co. D, 357th Inft., Camp Travis, Texas.

Hartley, Paul B., 45th Infantry, Camp Gordon, Atlanta, Ga.

Hathorn, John D. (Crowley, La.), Base Hospital, Camp Travis, San Antonio, Texas.

Hayden, Rufus J., 352d Medical Detachment, Camp Dodge, Iowa.

Hays, Dr. R. E., Fort Riley, Kan.

Hazeltine, George, U. S. Naval Hospital, Newport, R. I.

Healy, F. H. (Braymer, Mo.), Surgical Sec. K, Ward L 63, Base Hospital, Ft. Riley, Kan.

Heard, Charles R., Aviation Flying, U. S. School of Aeronautics.

Heck, H. H., Co. F, 354th Infantry, American E. F.

Hedgepeth, T. H. (St. Joseph, Mo.), J. B. unit, Hospital Corps, Camp Dodge, Iowa.

Heiny, John D., 2d Lieut., Co. C, 139th Infantry, Ft. Sill, Okla.

Heinzman, Frank M., Rainbow Division, American Forces in France.

Heney, Fred (Laconia, N. H.)

Hess, Elmer C., 29th Training Battery, Field Artillery. Central Officers Training School, Camp Taylor, Kentucky.

Hess, Lawrence T. (Zanesville, O.), Base Hospital, Depot Brigade, Camp Sherman, Chillocothe, O.

Hellreigel, R. W., Med. Corps, Base Hospital, Camp Dix, N. J.

Hinchman, A. W., U. S. Army.

Hix, Ralph A., 157th Field Hosp., 115th Sanitary Train, Camp Kearney.

Hoard, Ralph, 157 Field Hospital, 40th Div., Camp Kearney, San Diego, Cal.

Hoffmann, S. Wallace (Statesville, N. C.), Base Hospital, No. 65, Fort McPherson, Ga.

Holt, G. E., Camp Funston, Kan.

Holt, V. E., Bakery Co., No. 374, Lewis Branch, Tacoma, Wash.

Honnold, James R., Camp Summerall, Talyhanno, Pa.

Hoose, Frank H., Jr., Med. Dept., 109th Infantry, Camp Hancock, Augusta, Ga.

Hoover, M. W. (Houston, Texas)), unknown.

Hopkins, H. P. (Perry, Mo.), student, Camp Funston, Kan.

House, Marshall S. (New Britain, Conn.), Co. 39, Tenth Bat., 151st Inf., Depot Brigade, Camp Devens, Ayer, Mass.

Howard, George W., Hospital Corps.

Howard, Horace J., Measles Ward, Camp Lewis, Wash.

Howard, W. S. (Las Cruces, N. M.), student.

Huer, L. W., Officers' Training School, Camp Kearney, San Diego, Cal.

Hughes, C. A. (Ellensburg, Wash.), Medical Corps, Fort Riley, Kan.

Hughes, R. E., Dental Infirmary Detachment, 40th Div., Camp Kearney, San Diego, Cal.

Hughes, W. J., Hospital Corps Training School, Naval Training Station, Newport, R. I.

Huneryager, I. C., Naval Detention Camp, San Francisco, Cal.

Huntington, H. A., Ambulance Co. 19, Med. Officers Training Camp, Ft. Riley, Kans.

Hunziker, Fred O., Camp Dodge, Des Moines, Iowa.

Hurd, T. R., Hospital Corps, Camp Custer, Battle Creek, Mich.

Hurt, W. T., 162d Aero Squad., Wright Field, Dayton, Ohio.

Hutt, Lydia, Base Hospital, Camp Pike, Ark.

Ibach, Carl (student), Fort Hospital, Des Moines, Iowa.

Ihde, Clifford J., Camp Dodge, Iowa.

Illsley, W. W., Ward Master, Ward 21, Camp Lewis, Wash.

Ingle, J. L. (La Grande, Ore.), Lieut. (pilot) U. S. Air Service, American E. F.

Ireland, R. C., Base Hosp., Med. Dept., Camp Lewis, Wash.

Israel, George B., Marine Barracks, Navy Yard, Philadelphia, Pa.

Irving, C. E., Field Hospital 157, San. Tr. 115, Div. 40, Camp Kearney, San Diego, Cal.

Jack, Alvah G., Med. Dept., 315th Infantry, Camp Meade, Md.

Jacquith, L. E., Camp Greenleaf, Ga.

Jelks, Albert A. (Macon, Ga.), Emory Base Hospital unit, American E. F., Italy.

Johnson, A. B., Co. G, Second Regiment, Camp Dewey, Great Lakes, Ill.

Johnson, Fred E., Co. B, 210th Signal Bat., Camp Funston, Kan.

Johnson, Paul K., Camp Funston, Kan.

Johnston, Frank J., Evacuation Hospital No. 9, American E. F.

Jones, Dr. Earl D., First Lieut. in Medical Dept. of 3d Idaho National Guard Unit.

Jones Grover C., Tank Corps, Camp Colt, Gettysburg, Pa.

Jones L. I. (Des Moines, Iowa).

Jones, P. Keller, Base Hospital No. 64, Camp Sevier, S. C.

Jordan, O. L., Evac. Hosp. No. 20, Camp Upton, N. Y.

Kalmbach, R. E., Fort Oglethorpe, Ga.

Kalt, Albert Victor, Co. A, 316th U. S. Engineers, Camp Lewis, American Lake, Wash.

Kane, E. P., Corp., E 4, M. O. T. C., Fort Riley, Kansas.

Keckler, Guy E., Officers' Camp Quartermaster, Camp Wadsworth, Spartansburg, S. C.

Keckler, John W. (Hagerstown, Md.), Infirmary B-11, 154th Depot Brig., Camp Meade, Md.

Keithley, Rufus E., U. S. Navy.

Kell, Robert I. (Oakland City, Ind.), Camp Taylor, Ky.

Kellain, Lawrence J., Med. Corps, Camp Greenleaf, Fort Oglethorpe, Ga.

Kelly, John, Med., Navy.

Kelly, Dr. O. S., Aviation. On special duty at Oklahoma City, Okla

Keyes, W. J. (Portsmouth, O.), Captain 134th Field Artillery, Camp Sheridan, Ala.

Kiblinger, S. B., Yale Army Laboratories, Box 477, Yale Station, New Haven, Conn.

Kidwell, J. R. (Jackson, Miss.), Sergeant, Q. M. Dept., Camp Beauregard, La.

Kilman, Dr. Joseph E., Medical Reserve Corps, Indianapolis, Ind.

King, Errol R., Serg., 164th Field Hospital, 116th Sanitary Train, American E. F., France.

King, Robert M., Camp Funston, Kan.

Kline, Curtis, Waco, Texas.

Knowlton, John (Chelsea, Mass.), Camp Devens, Ayer, Mass.

Kohlmeyer, Paul R., Motor Co. No. 3, Camp Greenleaf Annex, Chickamauga Park, Ga.

Kraft, Glen H., Camp Hancock, Ga. Aviation.

Lacy, Dr. P. F., Spruce Division, Vancouver, Wash.

La Plount, E. V., Isolation Ward, Camp Lewis, Wash.

Lamb, Howard E., Med. Det., 354th Infantry, American E. F.

Lamb, W. B. (Middletown, O.), U. S. N. Hospital, Annapolis, Md.

Lambert, Lester C., Camp Dodge, Des Moines, Iowa.

Larkin, Harry, 157 Field Hospital, 115th Sanitary Train, Camp Kearney, San Diego, Cal.

Laslet, Raymond (Jersey City, N. J.)

Lattig, Max W., Yale Army Laboratories.

Lawrence, J. W., U. S. Navy. Home address, R. 1, Maxon Mill, Ky.

Lee, Morgan P., 363d Infantry Infirmary American E. F.

Lemaster, F. L., Ambulance Corps, Ft. Sill, Okla.

Lemaster, F. E., Headquarters Co., 356th Inf. Reg. Band, Camp Funston, Kan.

Leonard, Herman M. (El Paso, Ill.), Co. 21, C. A. C., Fort Terry, N. Y.

Levegood, Robert R., Serg. M. D., Base Hospital, Camp Hancok, Ga.

Lewis, W. B., Regimental Infirmary, 19th Inf., Fort Sam Houston, Texas.

Lindsey, Owen S., 410 Sq. A. S. S. C., Vancouver Barracks, Wash.

E. S. Linhart, National Army.

Linton, Melvin (Dorchester, Mass.)

Lippincott, A. A., Co. B, Officers Training Camp, Camp McArthur, Waco, Texas.

Lippincott, Howard (Moorestown, N. J.), Mission des-Annis, Rue de la Liberte, Role-du-Jura, France.

Lodwick, Idris, 351st Infantry, Co. B, Camp Dodge Iowa.

Long, Custer B., Infirmary Co. 4, 305th Ammunition Train, Camp Lee, Va.

Long, H. J. (Toledo, O.), unknown.

Longstreth, G. E., Camp Funston, Kan.

Losee, Gordon P. (Westfield, N. J.)„ Field Hospital No. 309, Camp Dix, N. J.

Lotts, D. M., U. S. Naval Training Sta., San Francisco, Cal., c-o Hospital School.

Lundgren, Abel L., Post Hospital, Wilbur Wright Field, Fairfield, Ohio.

Lux, Leo L., Co. B. Development Bat., Camp Fremont, Cal.

Lyda, E. L., U. S. Navy, Great Lakes Naval Training Station.

Lyngholm, Thorwald, Field Hospital Co. 344, Camp Grant, Ill.

Mack. Frank A. (Arlington, Mass.), Medical Corps, Base Hospital, Camp Devens, Mass.

MacDonald, F. A., Base Hosp., Camp Kearney .

Mac Leod, John, No. 2,101,027, Tenth Siege Battery, Fort Cambridge, Halifax, N. S.

MacRae, Dr. J. N., Capt. 18th Batt. Canadian Inf., B. E. F., France.

Maddox, H. H. (Mattoon, Ill.), Co. C, 7th Regt., Barracks 729, Camp Perry, Great Lakes, Ill.

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An osteopath in the service writes:

"No one realizes more than I the discrimination against the D. O.s. I put in an application a year ago for an examination in the Medical Corps. My application was accepted, and I was asked to take the examination, which I did, and passed it. Then I received a letter stating that in view of the fact that I was not a graduate from a school recognized by the A. M. A. it would be impossible to commission me in the Medical Corps."

Perrin T. Wilson writes cheerfully from France as follows:

"As you know, I was attached to a field hospital, but when I arrived in France I was detailed to this camp hospital and evidently made good, for I was later transferred and definitely assigned to the company. At present I am at work in the surgical ward and operating room, acting as general ward man, anesthetist, non-sterile and sterile nurse as occasion arises. I work from 7 a. m. to 7 p. m., seven days a week and am enjoying the work.

"I certainly appreciate the work the profession is doing for us."

Reports have reached the JOURNAL of the death of several of our loyal members in the service of our country. Lieut. Eugene Raynor, recently of Battle Creek, Mich., fell in action in France in July. Dr. Raynor was making a splendid professional record, but when the call to arms came he laid professional duties aside, went to the officers training camp at Fort Sheridan, won his commission in the line, and was immediately sent abroad. He had a fine record in the Army and just as the turn came which is to accomplish what he offered his life for his life was taken.

Dr. Marion Burns, of Los Angeles, had enlisted in the aviation service, and while qualifying for work in Europe he was killed in an aeroplane accident Aug. 23. Dr. Burns was a brother of Dr. Louisa Burns, and since his graduation had given his time chiefly to fitting himself to do expert X-ray work. He had a scientific mind and had done much valuable work along several lines of research. He will be greatly missed by a wide circle of friends in Southern California, and Dr. Louisa Burns will have the sincere sympathy of the profession in the loss of her promising brother.

Henry D. Webb, M. D., D. O., of Orange, N. J., has received notification from Washington of his appointment to the Medical Corps of the Army, with rank of captain, and was ordered to report to Fort Oglethorpe, Ga., before Oct. 25. Dr. Webb served as an Army surgeon in the Spanish-American War.

Walter Novinger, of Trenton, N. J., recently enlisted in the Medical Department of the Army under the rule admitting men between the ages of 46 and 56, and was assigned to duty at Fort Slocum, N. Y. Dr. Novinger reports that he likes the work and receives good treatment from the medical officers.

DEPARTMENTS

OSTEOPATHIC LESION

LOUISA BURNS, M. S., D. O.

Part IV.

STRIATED MUSCLES IN LESIONED AREAS

The muscles of lesioned areas show certain changes from the normal. In vertebral lesions these changes are more pronounced in those small muscles which lie nearest the affected vertebrae, and the changes which occur in the larger spinal muscles, or in the muscles of more distant parts of the body of any size, may be slight or negligible.

The first noticeable change in the muscles of the lesioned area is a slight contraction. Within a few hours the muscles become congested, and this congestion in small animals is perceptible in the X-ray plate. Occasionally it can be seen in the muscles of lesioned areas in human subjects. Small hemorrhages may be found in the muscles of lesioned animals.

Associated with the congestion, and often following the subsidence of the congestion, is a period of edema. This is associated, as probably edema is usually associated, with a local acidosis. The muscles which are congested or edematous, or both, give a peculiar logy feel to the examining fingers. They seem somewhat pasty or putty-like, and their turgescence shortens the fibers, thus acting upon the points of attachment somewhat as normal contraction of the muscles might do. But the effect is somewhat different from the effect of a normal muscle contraction in that the disturbed bony relationship is fixed; is not properly related to the demands of posture, balance, and so on, and the normal periods of relaxation do not occur.

The microscopical examination of these muscle fibers shows the slight swelling, the over-filled blood vessels, and the paler striations. The changes as noted in the microscopical examination, however, are less noticeable than those noted in the gross examination.

The edema and the acidosis act upon the sensory nerve endings in the muscle fibers, producing two most noteworthy results—the muscles are found to be hypersensitive on palpation, and there is often a dull aching which may be rather severe in some cases. The edema and the acidosis act also upon the motor nerves, producing a certain amount of inhibitory effects. Such muscles are caused to undergo their normal contraction only with difficulty and, usually, at the expense of considerable pain.

The extent to which muscles may be affected by bony lesions varies. In some cases only the very small muscles in the immediate neighborhood are recognizably affected. In other cases not only the larger muscles of the back, but also the muscles of the limbs may be made subject to the congestion, edema and acidosis.

In the case of a bunion, for example, the muscles of the calf of the leg are often rather seriously affected. In lumbar lesions, the edema, acidosis and congestion of the lumbar muscles may result in lumbago. Lesions of the upper thoracic region are rarely associated with painful tension of the biceps, sometimes of other arm muscles. Other examples must occur to all osteopathic physicians of any long experience.

After the lesion has been corrected, the circulation appears to be rather quickly returned to the normal, judging by the X-ray pictures of human subjects. With a good circulation of good blood, the edema and the acidosis must be quickly eliminated. The painfulness may remain for some time, or may disappear very speedily. This matter probably depends upon two factors—the efficiency of the restored circulation and the injury to the nerve of the affected region.

From what has been said the temporary good results secured by massage of the affected muscles or by application of heat, cold or ointments can be understood. These agents facilitate the circulation, the edema and acidosis are diminished, and a temporary good follows. But if the lesion is not corrected such good results will be only temporary. The only permanent good must come from the correction of the underlying lesion.

PACIFIC BRANCH, THE A. T. STILL INSTITUTE,
San Gabriel, Cal.

OTOLOGY

Edited by F. P. MILLARD, D. O., Toronto.

COLD FEET AND EAR DISTURBANCES

There is an indirect relationship between the feet and the ear. There are persons immune, we might say, from ear complications, regardless of any consistent care of their feet,

but the majority of people will have coryza or rhinitis, at least, if their feet become wet or even dampened. They will sniffle their head becomes stuffy and a slight cold with ringing in the ears follows. The more anemic they are the greater the tendency toward a catarrhal condition. The involvement of the lymphatics, the lessened vasomotor tone, and the general lassitude following a slight cephalic tissue congestion are all marked symptoms in most if these cases.

Back of the ear condition is a systemic disturbance, a lack of tone, a weakened lumbar or pelvic condition. There may be lower dorsal and lumbar lesions, a slight scoliosis, a sacral, lumbo-sacral or sacroiliac lesion, or several lesions. Organic variations may be noted, and in all probability a splenic complication and a touch of nephritis.

As stated in a previous article, no case of tubal involvement, or middle-ear instability, is properly treated until sacroiliac adjustment is made, so in each case of ear complaint it is well to determine at once the condition of the pedal extremities. Just as no pair of eyes will be strong and bright if any systemic trouble exists, so in ear affections constitutional integrity must be sustained if we wish to secure a perfectly normal state in the three parts of the ears.

The habit of wetting the hair each morning in order to make it lie down properly is followed sooner or later by a naso-pharyngeal catarrhal condition. The hair should always be thoroughly dried, especially around the ears, and the vaso-motors toned up by a vigorous manipulation over the temples and around the neck, especially below the ears. The lymphatic glands along the sides of the neck, just below the ears, have a tendency to congest and indurate if any congestion of the nose and throat exists.

With regard to the feet we confront a proposition our forefathers were not familiar with. High shoes or boots were always worn, and the ankles protected. We now live in an age where we prefer oxfords and the ankles are exposed. Few wear spats and few wear heavy stockings. Mostly silk or light weight hosiery are worn. How can we expect to subdue catarrhal conditions if we do not protect ourselves? The soles of the feet are more susceptible to cold than are the ankles.

If wristlets and anklets were worn we would be much more free from cold in the head. Any cold in the head has a direct bearing upon the membranes of the ear. The antrum and attic are closely connected with the mastoid cells, and we all know the prevalence of mastoiditis. We should instruct our patients to care more for their bodies than they do, and point out the necessity of keeping all parts of the body properly protected.

If we find in a case of ear trouble cold feet and systemic vaso-motor insufficiency, we will need to adjust every part of the body that is at fault, from flat feet to a scoliotic condition. The splanchnic region is almost always involved, and the mesenteric lymphatics draining into the cysterni chyli are blocked. Ptosic conditions of the entrails will be found, the ribs depressed and the diaphragm drawing upon the structures passing through it. All these things deplete the system, and the blood that should be circulating in the lower extremities is lying in a static condition in the abdominal and pelvic viscera. The blood is forced cephalad and the tonsils congested. The membranes of the naso-pharyngeal region are involved, the lymphatics are nodulated and the system is poisoned. Auto intoxication is the result, and a listless and poorly oxygenated system is reflected upon the ears. Here we have the symptoms as usually found in nine-tenths of ear complications.

Along with irrigation of the nose and post-nasal spaces, and the opening of the tubae auditiva, we will sooner or later have to build up the system and re-establish a vaso-motor tone, if we expect to permanently relieve tinnitus aurium, otitis media and mastoid conditions. Urinalysis will aid in determining the systemic state of affairs, and will prove to be an index to the various organic involvements.

We must never become so special in our work that we lose sight of remote causes. The flat-footed condition, possibly caused by constant standing, may work its way upward and produce a tilted pelvis and a lordosis or a "straight" spine. The secondary symptoms may be many, and the undermining at the base may eventually involve the throat and then the tubes and middle ears.

Not all ear disease is the result of local infection or naso-pharyngeal congestion. It is that remote cause that should interest us. It is easy enough to find the local symptoms and causes, but we need to seek out primary causes as well as reflex. The true physician is the one who grasps the entire situation, be it near or remote, and removes the cause or causes.

MENTAL THERAPEUTICS

G. H. Snow, A. B., D. O.

We are told that one should be merry while eating, as it is a great aid to digestion. And in cases of melancholia and neurestheneia the physician often feels that if he could get the patient to indulge in a hearty laugh that much good would be accomplished. One who wishes

to obtain a better understanding of the psychology of laughter would do well to read the book on that subject by Boris Side, M. A., Ph.D., M. D.

He says: "We may therefore lay it down as a law that *the significant and the insignificant, the noble and the ignoble, the grave and the gay, the heroic and the grotesque, the unusual and the usual, the superior and the inferior, when juxtaposed, raise laughter.*" Laughter arises from the sense of freedom of mental activities: "We may lay it down as a law that relief from a great strain is an important aid to laughter.

"We can compare the comic and laughter with rest. In fact, we may go further and compare laughter with sleep; not with the sleep in which the senses and consciousness are inactive, but with the sleep state in which mental activities are present. May we not compare the ludicrous with the dream? The dream occurs during the rest state, during sleep. And what is sleep but a release from all the troubles and trammels of waking life."

While the following is not quite to the point in this department, yet perhaps it will do us good to think of it. He says: "Nations in which the intellectual and artistic sides are undeveloped look for their enjoyment, merriment and laughter in gross and dangerous games. Witness the gladiatorial games of the ancient Romans, the bull fights of the Spaniards and the football of the American populace. The whole fun of the game is danger overcome, made easy and playful.

"Many hide their craving for games of danger, this ferocious element, under the guise of training. Such games, it is claimed, train the man. What such games really train is the brutal, animal play instinct."

W. G. Jordon in his book on "Self Control" says: "Man has two creators, his God and himself. His first creator furnishes him the raw material of his life and the laws in conformity with which he can make that life what he will. His second creator—himself—has marvelous power he rarely realizes. It is what a man makes of himself that counts. When a man fails in life he usualy says, 'I am as God made me.' When he succeeds he proudly proclaims himself a 'self-made man.' Man is placed into this world not as a finality, but as a possibility. Man's greatest enemy is himself. Man in his weakness is the creature of circumstances. Man in his strength is the creator of circumstances. Whether he be victim or victor depends largely on himself."

"To see his life as he might make it, man must go up alone into the mountain of spiritual thought as Christ went alone into the garden, leaving the world, to get strength to live in the world; he must there breathe the fresh, pure air of recognition of his divine importance as an individual, and with mind purified and tingling with new strength he must approach the problems of his daily living. And the self-control that is seen in the most spectacular instance in history, and in the simplest phases of daily life, is precisely the same in kind and quality, differing only in degree. This control man can attain, if he only will; it is but a matter of paying the price."

"Self-control may be developed in precisely the same manner as we tone up a muscle, by little exercise day by day." "These exercises may be very simple—dropping for a time an interesting book at the most thrilling page of the story; jumping out of bed at the first moment of waking, etc."

STATE AND LOCAL SOCIETIES

CALIFORNIA: At its first meeting of the season, September 17, the San Joaquin Valley Association elected officers as follows: John Aaronson, president; Sarah F. Pugh, vice-president; Leona Taylor, secretary-treasurer; members of council Iva Still Wallace, Lewis Bruce, W. L. Nichols, Avon Elder.

The bi-monthly meeting of the Osteopathic Society of the Sacramento Valley at Sacramento on October 12th, was followed by a dinner at the Land Hotel. The speakers were Drs. D. J. Cleman Brown, of Stockton, and W. F. Harlan, of Arbuckle.

CONNECTICUT: At a meeting of the State Association in the offices of B. F. Riley, New Haven, on October 26th, officers were elected as follows: President, Harold Sticer, Meriden; vice-president, C. V. Clark, Hartford; secretary, D. Van Deuson, Bridgeport; treasurer, A. B. Sturgis, Wallingford.

ILLINOIS: A feature of the October meeting of the Chicago Association at the Hotel Sherman was a discussion of neuritis by Dr. F. A. Turfler, whose talk was accompanied by a demonstration of treatment on several patients.

MINNESOTA: Dr. Arthur D. Becker, president of the State Association, sent out the following appealing "call to arms" this fall:

"The time has arrived when every osteopathic physician in Minnesota must declare himself or herself. Either you are a worker or you are not. We cannot defer the decision a day longer. We must either put our shoulder to the wheel and give a series of sturdy pushes or we must be known forever among our colleagues as among those who do not vitally care just what becomes of osteopathy either as a practice or as an institution. I have been selected by the M. S. O. A. as one of your servants for the coming year. It is for me to sound the call to arms in Minnesota. The opportunity to be of real service is here. It cannot be side-stepped. Let us make the M. S. O. A. 100 per cent right now. We seriously need every one of you as members. We need your money, we need your time, we need your allegiance, and we need you. Obversely, you need us. On the work we are trying to accomplish will depend your future standing as a profession, your practice and the very life of osteopathy. The time is NOW. We must be organized, correlated and unified perfectly if we are to accomplish the utmost. Let every member of our profession be a committee of one to see that the neighbor osteopathic physician is a member of the M. S. O. A. in good standing and ready to do his or her part in putting osteopathy eternally on the map."

NEW YORK: The State society had a successful twentieth annual meeting at the Hotel Astor, New York City, Friday and Saturday, November 8th and 9th. A varied and interesting program included:

Friday

"Treatment of Dislocations of the Metatarsals," Hugh L. Russell, Buffalo; "Ptosis from Personal Observations—X-Ray Pictures," Dayton B. Holcomb, Chicago, Ill.; "Applied Osteopathy"—With Clinic, S. V. Robuck, Chicago, Ill.; "Women's Bureau of Public Health,"Short-Comings," general discussion. Emma Wing-Thompson, Schenectady; "Some Causative Factors in Sciatica," Frank L. Goehring, Pittsburgh, Pa.; "Osteopathic Adjustment of Children from Municipal Court," Ira W. Drew, Philadelphia, Pa.; "Osteopathy and Feeble-Mindedness," Raymond W. Bailey, Philadelphia, Pa.; "Melting Pot," Ralph H. Williams, Rochester, N. Y., moderator.

Saturday

"Applied Osteopathy"—with Clinic, S. V. Robuck, Chicago, Ill.; "Osteopathic Physiology for Physician and Patient," John A. MacDonald, Boston, Mass.; "Treatment of Mental Diseases in Private Practice," L. Von H. Gerdine, Des Moines, Iowa; Business session—Election of officers. "Specific Treatment of Paroxysmal Asthma," Frank N. Oium, Oshkosh, Wis.; "Focal Infection," Arthur C. Stoney, D. D. S., New York City; "The Value of the Ophthalmoscope to the General Practitioner," William S. Nicholl, Philadelphia, Pa.; "The Value of Corrective Exercise to the Osteopath," Edith Stobo Cave, Boston, Mass.; Discussion; "The Osteopathic Cause of Mental Diseases," L. Van H. Gerdine, Des Moines, Iowa.

The election of officers resulted as follows: President, L. Mason Beeman, New York; vice-president, Aurelia Henry, New York; secretary, C. M. Bancroft, Canandaigua; treasurer, Cecil Rogers, New York; sergeant-at-arms, F. W. Miller, Oneida, and directors—John H. McDonald, Troy; William Apthorp, Oneonta, and C. H. Whitcomb, Brooklyn.

A "lesion" program was carried out at the monthly meeting of the Osteopathic Society of the City of New York at the Murray Hill Hotel, November 16th. It was an earnest osteopathic get-together which took its cue from the following schedule: "The Osteopathic Lesion," Charles Hazzard; "Are We Drifting Away From It?" A. B. Clark; "Specific vs. General Treatment," symposium, Ethel K. Traver, S. C. Mathews; "Some of Our Own

NOTES AND PERSONALS

Chicago Hospital Work: The Chicago Osteopathic Hospital has been a busy place this fall, the influenza having made large tax upon its resources. Several M. D.'s brought cases that could not be taken care of in other hospitals. The results have been very satisfactory, and it is planned to make some very interesting and valuable statistics available. These statistics will be compiled and will undoubtedly be of great value in furthering the "gospel" of osteopathy in the case of acute diseases.

Licensed to Practice: Of the eleven osteopathic physicians who took the June examination, nine have been licensed to practice in Ohio. They are: Ira Chamberlin, Oberlin; Louis Hubbell Pumphrey, Middletown; Edith Emily Devesmith, Wauseon; James A. Bowman, Youngstown; Alfred Blackburn Carson and Thomas E. Ashton, Delaware; H. L. Brown; Piqua; Charlotte J. Claypool, Columbus; Minnie Elizabeth Maurer, Canton.

May Refuse Chiropractic Certificate: The attorney general of Ohio, in an opinion recently handed down, decides that the regular registrar of the Vital Statistics Bureau, may refuse to accept death certificates signed by a chiropractor, basing his ruling on the law

which declares that physicians only can legally sign such certificates. Therefore, in case of death of a chiropractor's patient, a coroner's inquest is required.

Osteopathic Red Cross Auxiliary: Dr. George W. Goode, of Boston, has permanently organized Osteopathic Auxiliary No. 83, Boston Metropolitan Chapter Red Cross. Officers have been elected as follows: President, Dr. Agnes G. Lake; secretary, Dr. Frances Graves; treasurer, Dr. Helen G. Sheehan. The committee chairmen are as follows: Membership, Dr. Gertrude Townsend; vice-chairman, Mrs. P. E. Brodbeck; publicity, Dr. R. Kendrick Smith; workroom, Dr. Aubrey W. Hart; hospital garments, Dr. Edna Greenwood; knitting, Mrs. Charles H. Lake; ways and means, Dr. Ada A. Achorn.

Chiro Convicted: In the district court, L. J. Certain was convicted of practicing osteopathy under and by the name of "chiropractic." The jury was out a very short time. A fine of $250 was assessed.

It was brought out in the trial that "Dr." Certain had been courteously notified of the law's requirements and given every opportunity to qualify and become licensed, but that he had continued to practice without a license.

It was also brought out by Prosecutor Frank Hunter in cross-examination of Certain that he was a member of an organized law-evading "chiropractic" defense pool, which paid all fines of its members and furnished outside counsel to take charge of the cases when one of the organization was on trial. Certain admitted that if he was fined, this organization would pay it. Attorney Holmes, of La Crosse, Wis., was present to conduct the defense.—Miles City (Montana) Star.

A Queer Place for This Lie: The "Truth Teller" in a recent issue has the following: "It is only a matter of a few more years and osteopathy will be no more. Specifically, it is little more than the Swedish movements combined with deep massage now. Legislatively, it is a small wart on the side of "official" medicine, and getting smaller all the time."

Sexual Neurosis: "Disorders of the Sexual Functions," by Max Hukner, M. D., published by F. A. Davis Co., Philadelphia, is a work on sexual neurosis which contains much that is of value even to the general practician. It fills a gap that has existed between the work of the neurologist and the genitourinary specialist. It contains considerable on the subject that has never before appeared in print. It gives the pathology and treats the following subjects: Impotence, Pollutions, Priapism, Satyriasis, Nymphomania, Frigidity, Vaginismus, Dyspareunia, Absence of Orgasm, Enuresis, Evil Consequence of Withdrawal and Continence. The subject of treatment receives especial attention and some of the treatment recommended is similar to that of the osteopathist. A good book for any physician to read. —G. H. Snow, A. B., D. O.

Institution for Backward Children: The announcement in this issue, of the establishing at Atlantic City, N. J., of the institution for the care and treatment of backward and deficient children should be greeted with satisfaction by the profession. These cases offer the profession a splendid field. This has been demonstrated by many and particularly by Drs. Drew and Bailey and those associated with them.

This institution should be a success from the start and if a success it will reflect great credit upon the profession. The osteopathic physicians connected with this institution are so well known that there should be no hesitancy about directing proper subjects to them.

Personal: Mrs. D. M. Stahr, wife of Dr. D. M. Stahr, of Piqua, has been conspicuously honored among Piqua Red Cross workers by being chosen as publicity manager for the Red Cross activities of that chapter . Dr. Stahr himself has contributed to the winning of the war by doing "Four Minute Man" work for the past year.

Dr. F. P. Baker, of Lancaster, Ohio, has been added to the hospital staff of physicians of the Delaware Springs Sanatorium.

Dr. E. H. Calvert, of Columbus, Ohio, was out of practice for a while because of a back action kick of his automobile crank, on October 22d, which resulted in a fracture of the lower end of the radius.

Dr. Ella X. Quinn has moved from St. Augustine, Fla., to Miami for the winter.

Dr. I. C. Morris, of Spokane, Wash., has planned to go to California for the winter to resume teaching technique. He taught classes of D. O.'s two years ago in Pasadena, Hollywood, Long Beach, and other places, besides doing work in Los Angeles and expects to have classes in several cities.

Dr. John H. Skene, of 4624 Sheridan Road, Chicago, whose practice was broken up by service in the Army under the first draft, has been discharged and is seeking a location. He announces his willingness to act as an experienced assistant.

Dr. Avis Bodle Maxwell, of Boise, Idaho, has been appointed a member of the State Board of Examiners.

Married: At Paris, Ill., on November 8, Dr. Daisy B. Glassco, of Warren, Ohio, to William S. Daugherty, of Rockville, Indiana. They will make their home in Rockville.

Born: To Dr. and Mrs. Harry B. Martin, 287 East 18th Street, Brooklyn, New York, Wednesday, November 13, 1918, a daughter, Marjorie Elizabeth.

Died: On November 6th, as a result of drowning accident, at Rangeley Lakes, Me., the father of Dr. H. P. Frost, of Worcester, Mass.

On October 19th, after a week's illness with influenza, and double pneumonia, Dr. Ralph L. Baringer, Oregon, Ill.

At her home in Hutchinson, Kansas, of

pneumonia, on October 25, Elva Snethen Tandy, wife of Dr. R. T. Tandy.

On October 16th at his home, 490a Monroe Street, Brooklyn, N. Y., from over-exertion after partial recovery from Spanish influenza, Samuel L'Hommedieu, husband of Dr. M. C. Hollister L'Hommedieu.

Dr. F. H. McCall, of Atlantic City, N. J., of pneumonia. He was a successful physician, active in professional interests.

Dr. H. L. Perham, of Concord, N. H., of pneumonia. Dr. Perham had been secretary of the State society and a most active and valued member.

On October 18th at Carrollton, Ill., Dr. Walter S. Dressel.

On October 18th of pneumonia following influenza, Dr. Grace Bullas, Biloxi, Miss.

For Sale: A good practice in a Maine town; population 8,000. Reason for selling given upon request. Address S. B., A. O. A. JOURNAL.

For Sale: A $3,000 practice for sale in Pennsylvania, located in the richest valley of the State. No competition. Address A. B., care JOURNAL of the A. O. A.

Wanted: Would like to buy practice in State of Missouri or Pennsylvania. Address W. R., care JOURNAL of A. O. A.

Osteopath Wanted in England: A well established member of the A. O. A. in one of the large English cities wishes an assistant, preferably a man who knows the naso-pharyngeal technique. Address England, A. O. A. JOURNAL, Orange, N. J.

APPLICATIONS FOR MEMBERSHIP

Colorado

Weber, Winifred G. (A), De Groff Bldg., Colorado Springs.

Iowa

Atkinson, B. E. (S), Story City.

Kentucky

Waller, Granville B. (A), 411 W. Chestnut St., Louisville.

Maryland

Belland, Fred A. (Ph.), Baltimore (temporary).

Michigan

Webster, Grace Davenport (DMS), Stevens Bldg., Detroit, Ohio.

Ohio

Urbain, Victor P. (A), Reutschler Bldg., Hamilton.

Lynch, Clarence A. (A), 301 Buckeye St., Miamisburg.

Pennsylvania

Capers, Richard L. (Ph.), Grove City.

Patton, Mary Alexander (Ph.), Widener Bldg., Philadelphia.

Heibel, George E. (Ph.), 414 Water St., Warren.

CHANGES OF ADDRESS

Baker, R. P., from Lancaster to Dela. Spgs. San., Delaware, Ohio.

Barrett, Geo. A., from 816 E. 45th St. to 2408 N. 45th St., Seattle, Wash.

Baxter, M. V., from Stamford to Graham Bldg., Greenville, Texas.

Billings, L. G., from Messinger Bldg. to Produce Exchange Bldg., Toledo, Ohio.

Black, A. L., from Joplin, Mo., to Lyons, Nebr.

Boyd, Nat. W., from Philadelphia to 71 Herman St., Germantown, Pa.

Broach, Elizabeth, from 34 Colquit Ave. to 640 Highland Ave., Atlanta, Ga.

Busse, Clara, from Chicago to 104 N. Commercial St., Neenah, Wis.

Card, F. C., from Turner Bldg. to Mayo Bldg., Tulsa, Okla.

Claussen, P. M. and B. C., from Indianola, Ia., to Signal Mt., R. F. D., Chattanooga, Tenn.

Corby, Marie M., from 1749 W. 49th St. to Brack Shops, Los Angeles, Calif.

Corkill, Lena C., from Kearney, Nebr., to Norton, Kans.

Crowe, I. B., from 305 Mechanic St. to Goff Bldg., Clarksburg, W. Va.

Deane, J. W., from Beresford, S. D., to Brownsville, Tenn.

Dillabough, W. J. E., from 615 Fifth Ave. to 117 W. 58th St., New York City.

Doe, A. H., from 523 Main St. to Case Bldg., Racine, Wis.

Eiler, Fred S., from Meadville, Pa., to Wick Bldg., Youngstown, Ohio.

Flint, G. C., from Huntington Chambers to 706 Huntington Ave., Boston, Mass.

Fogg, C. O., from Medford, Mass., to 1st St., Lakewood, N. J.

Fraser, Miller, from Oakland to 109 Ellis St., San Francisco, Calif.

Fuller, A. M., from Bellevue to 153 E. Forest St., Clyde, Ohio.

Harwood, Mary E., from Kansas City, Mo., to Lake Hamilton, Fla.

Higgins, S. E., from Whitewater to Hayes Blk., Janesville, Wis.

Hurd, Grace L., from Brooklands to Woodward Bldg., Washington, D. C.

Kinsman, A. R., from 182 Upland Rd. to 18 Prentiss St., Cambridge, Mass.

La Rue, J. B., from Lancaster to Peoples Bk. Bldg., Zanesville, Ohio.

Mackinnon, Barbara, from Los Angeles, Calif., to North Shore, N. S.

Markert, W. W., from Petoskey to Merrill Bldg., Saginaw, Mich.

Mattern, A. V., from Des Moines, Ia., to Minahan Bldg., Green Bay, Wis.

McLaughlin, E. A., from Mason Bldg. to Black Bldg., Los Angeles, Calif.

Moore, E. A., from Belleville, Kans., to 35 S. Lincoln St., Denver, Col.

O'Connor, Jessie, from 5223 Winthrop Ave. to 17 N. State St., Chicago.

Osgood, L. E., from 83 Bradford St., to 26 Willis St., Pittsfield, Mass.

Perry, R. M., from 715 E. 9th St., to Hotel Tanner, Kansas City, Mo.

Phillips, J Marshall, from De Soto, Mo., to Crique Bldg., Hollywood, Calif.

Price, E. H., from 1st and Main Sts. to 921 N. Monroe St., Hutchinson, Kan.

Quinn, Ella X., from St. Augustine to Miami, Fla., General Delivery.

Scallan, A. W., from Cable Bldg. to 1942 W. 102d St., Chicago, Ill.

Stubblefield, Hallie, from Rock Hill to Greenville, S. C.

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